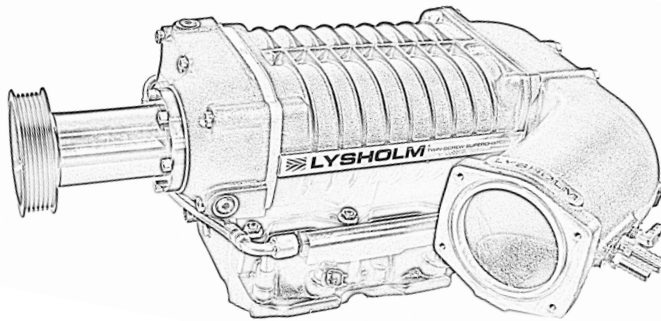


Chevrolet Camaro SS

Lysholm Twin-Screw Supercharger System* Installation Instructions 2010-2011 Model Year 6.2L LS3/L99



**Legal in California only for racing vehicles which may never be used upon a highway*



LYSHOLM®
TWIN-SCREW SUPERCHARGER

AirPower® Group

1650 Pacific Avenue, Channel Islands CA 93033-9901
Phone: 805 247-0226 • Fax: 805 247-0669 • www.lysholm.us

FOREWORD

This manual provides information on the installation, maintenance and service of the Lysholm supercharger kit expressly designed for this vehicle. All information, illustrations and specifications contained herein are based on the latest product information available at the time of this publication. Changes to the manual may be made at any time without notice. Contact Lysholm for any additional information regarding this kit and any of these modifications at (805) 247-0226 8:00am-4:30pm PST.



Take note of the following before proceeding:

1. Proper installation of this supercharger kit requires general automotive mechanic knowledge and experience. Please browse through each step of this instruction manual prior to beginning the installation to determine if you should refer the job to a professional installer/technician. Please contact your dealer or Lysholm for possible installers in your area.
2. **This product was designed for use on stock (*un-modified, OEM*) vehicles.** The PCM (*computer*), engine, transmission, drive axle ratios and tire O.D. must be stock. If the vehicle or engine has been modified in any way, check with Lysholm prior to installation and use of this product.
3. Use only premium grade fuel with a minimum of 91 octane (*R+M/2*).
4. Always listen for any sign of detonation (*knocking/pinging*) and discontinue hard use (*no boost*) until the problem is resolved.
5. Lysholm is not responsible for any clutch, transmission, drive-line or engine damage.

Exclusions from Lysholm warranty coverage considerations include, but not limited to:

1. Neglect, abuse, lack of maintenance, abnormal operation or improper installation.
2. Continued operation with an impaired vehicle or sub-system.
3. The combined use of Lysholm components with other modifications such as, but not limited to, exhaust headers, aftermarket camshafts, nitrous oxide, third party PCM programming or other such changes.

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CHEVROLET CAMARO SS

INSTALLATION INSTRUCTIONS

Congratulations on selecting the best performing and best backed automotive supercharger available today... the Lysholm® Supercharger!

Before beginning this installation, please read through this entire instruction booklet and the Street Supercharger System Owner's Manual which includes the Automotive Limited Warranties Program and the Warranty Registration form.

Lysholm supercharger systems are performance improving devices. In most cases, increases in torque of 30-35% and horsepower of 35-45% can be expected with the boost levels specified by Lysholm. This product is intended for use on healthy, well maintained engines. Installation on a worn-out or damaged engine is not recommended and may result in failure of the engine as well as the supercharger. **Lysholm is not responsible for engine damage.**

Installation on new vehicles will not harm or adversely affect the break-in period so long as factory break-in procedures are followed.

For best performance and continued durability, please take note of the following key points:

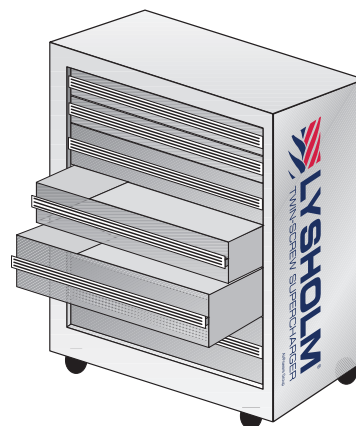
1. Use only premium grade fuel 91 octane or higher (R+M/2).
2. The engine must have stock compression ratio.
3. If the engine has been modified in any way, check with Lysholm prior to using this product.
4. Always listen for any sign of detonation (pinging) and discontinue hard use (no boost) until problem is resolved.
5. Before beginning installation, replace all spark plugs that are older than 1 year or 10,000 miles with original heat range plugs as specified by the manufacturer and reset timing to factory specifications (follow the procedures indicated within the factory repair manual and/or as indicated on the factory underhood emissions tag). **Do not use platinum spark plugs unless they are original equipment.** Change spark plugs every at least 15,000 miles and spark plug wires at least every 50,000 miles.

TOOL & SUPPLY REQUIREMENTS:

- Factory Repair Manual
- 3/8" Socket and Drive Set: SAE & Metric
- 1/2" Socket and Drive Set: SAE & Metric
- Adjustable Wrench
- Open End Wrenches: 3/8", 7/16", 1/2", 9/16"
- Flat #2 Screwdriver
- Phillips #2 Screwdriver
- Drill Motor
- 1/8", 3/16", 1/4", 5/16, 27/64" Drill Bits
- 3/16" Allen Wrench
- Wire Strippers and Crimpers
- Utility Knife

If your vehicle has in excess of 15,000 miles since its last spark plug change, then you will also need:

- Spark Plug Socket
- NEW Spark Plugs



'10 - '11 CAMARO SS 6.2L

Part No. 2310160

PARTS LIST

IMPORTANT: Before beginning installation, verify that all parts are included in the kit. Report any shortages or damaged parts immediately.

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
2L218-060	S/C ASY, 2300 LYS, GM LS 821/823	1	8N107-005	WATER PUMP ASSY, 5GPM UNIV	1
2L036-365-01	PULLEY, 6-RIB, 3.65, LYSHOLM	1	5W001-002	FUSE TAP	1
4LGE112-010	AIR INLET, ASY, CAMARO SS	1	5W001-032	1/4" PLASTIC WIRE LOOM	60
7PS500-400	REDUCER, SILICONE, 5.0-4.0, BL	1	5W001-009	16-14GA MALE SLIDE INSULATED	1
7R002-064	#64 SAE TYPE F SS HOSE CLAMP	3	5W001-013	14-16 GA BUTT CONN BLU INSUL	4
7R002-080	#80 SAE TYPE F SS HOSE CLAMP	1	5W001-015	FUSE, BLADE TYPE 20 AMP	1
4LGE012-010	BOX, AIR INLET, 2010 CAMARO, L	1	5W001-022	T-TAP CONN, 14-16 AWG	1
7C040-008	M4-.7X8MM SCHD SS	2	5W001-024	MINI ATC FUSE TAP	1
7J250-001	1/4 WASHER, SAE, PLTD	4	5W001-041	12-10GA MALE SLIDE INSULATED	2
7F250-021	1/4-20 NYLOCK NUT ZINC PLATED	4	5W001-043	12-10GA X 1/4" RING TERMINAL	3
7A250-053	1/4-20 X .50 BHCS TORX SECURI	4	5W001-050	HARNESS, FUEL INJ PLUG W/WIRES	1
8H040-400	AIR FILTER, 4" FLANGE, 12" LON	1	5W001-014	FUSE HOLDER 10 GA WIRE	1
7PS400-225	BUMP SLEEVE, "4 X 2.25, BLACK	1	7A250-050	1/4-20 X .50 SHCS GR8 ZINC PLT	2
7U030-030	1/4" VACUUM HOSE	3	7E010-075	#12 X 3/4" SHT METL SCRWB HEX	3
7P125-109	FTG, 1/8NPT - 1/4 BARB, AL	1	7F250-021	1/4-20 NYLOCK NUT ZINC PLATED	2
7P250-045P	1/4 MALE NPT X 3/8 MALE BARB N	1	7J250-001	1/4 WASHER, SAE, PLTD	2
7A250-050	1/4-20 X .50 SHCS GR8 ZINC PLT	3	7U100-044	TIE WRAP, 4" NYLON	4
7J006-093	6MM WASHER, PLATED	3	7U100-055	TIE WRAP, 7.5" NYLON	6
4LGE010-050	BRKT, UPPER, AIR BOX, 2010 CAM	1	8F001-403	PUMP, WATER, BOSCH	1
4LGE010-060	BRKT, LOWER, AIR BOX, 2010 CAM	1	8F101-320	WATER PUMP RELAY ASSY	1
8A003-121	MAF, 3.8 I.D., LS LYSHOLM, BLK	1	8N010-060	BRACKET, BOSCH WATER PUMP	1
4LGE116-010	DRIVE ASY, CAMARO SS, '10-'11	1	5W001-011	16-14 GA RING TERM .26" HOLE	2
4LGE010-021	PLATE, TENS, MOUNTING, LS LYS	1	5W001-017	12-10GA X 3/8" RING TERMINAL	1
4LGE010-031	MNTG PLT, IDLER, LS CAMARO LYS	1	5W001-037	12-10 GA BUTT CON, SHRNK TYPE	2
2A017-878-10	SPACER, .875 OD X 3.221 L, ANO	2	5W001-040	12-10GA FEMALE SLIDE INSULATED	2
2A017-750-10	SPACER, .750D X 1.360 L, ANOD.	3	5W001-007	3/16" HEAT-SHRINK TUBING	0.83333
2A017-878-11	SPACER, .875 OD X .754 L, ANOD	5	5W001-025	FEM SLIDE, INSUL, MINI, 22-16AWG	1
2A017-875-26	SPACER, .875 OD X .404 ID X .085	1	4LGE155-010	SUPPORT ASY, CAMARO SS, '10-'11	1
4LGE017-011	SPCR, IDLER PILOT, LS CAMARO L	2	4LGE010-070	SHIELD, HEAT, IGN COIL, 2010 C	1
4LGE010-041	SUPPORT BRKT, CYL HEAD, LS CAM	1	7C060-020	M6 X 10 X 20MM HHCS ZN	1
4FA016-150	IDLER PULY, 6RIB 3.5" FLANGED	2	7J006-093	6MM WASHER, PLATED	6
7C080-120	M8 X 1.25 X 120 HXHD ZN PLT	3	5W001-030	1 1/2" HEAT SHRINK	1
7C010-040	M10 X 1.5 X 40 HXHD CL8.8 ZN	3	5W001-082	SLEEVE, FLEX BRAID .75" NOM	4
7C010-055	M10 X 1.5 X 50 HXHD CL10.9	4	5W001-090	HARNESS, ETC EXT, CAMARO SS	1
7C010-090	M10 X 1.5 X 90 HXHD CL8.8	1	5W001-091	HARNESS, MAF/IAT BRKOUT, CAMAR	1
7C010-120	M10 X 1.50 X 120 HXHD, CL10.9	2	4LGE014-010	RELOCATION ASSY, HTR HOSE, CA	1
7J010-002	10MM WASHER, ZINC PLATED	10	4LGE010-080	COVER, COIL BRKT, PASS, CAMAR	1
2A046-073	BELT, 6 RIB X 107.32 EFFECT. L	1	7U031-018	5/16 EFI FUEL HSE HI-PSR	3.5
7G010-005	NUT, PEM, M10 X 1.5, ZINC SEL	4	7U031-018	5/16 EFI FUEL HSE HI-PSR	1.8
7C080-008	M8 X 1.25 X 8MM BHCS, ZINC, CL	1	7R004-003	STEPLESS CLAMP, 145-70	4
7J312-000	5/16 FLAT WASHER-SAE4		4GR110-110	ASSY, DAMPER PIN, LS1-LS2-LS6	1
REMOTE W.WASHER ASSY, '10-'11	4GE155-030	1	7A250-050	1/4-20 X 50 SHCS GR8 ZINC PLT	3
4GE010-080	BRKT, WSHR RESVR, 2010 CAMARO	1	7J250-001	1/4 WASHER, SAE, PLTD	6
4GE010-090	BRKT, REMOTE FILL, 2010 CAMARO	1	7F250-021	1/4-20 NYLOCK NUT ZINC PLATED	3
4GE055-010	TANK "A", WSHR FLUID INTEGRAL,	1	7C060-028	STANDOFF, M6 X 10 M/F, 1175L	2
4GE055-020	CAP, THRD UNVENTED	1	7C060-027	M6 X 10 X 25 BUTN HD ZN PLT	2
4GE055-030	TANK, REMOTE FILL WSHR FLUID,	1	7C060-031	M6 X 10 X 30 BUTN HD ZN PLT	2
7A250-063	1/4-20 X .63 HHCS SS	6	7C060-017	M6 X 10 X 16 BUTN HD ZN PLT	2
7E010-050	#12 X 1/2 SHEET METAL SCREW	5	7J012-009	WASHER, #12 INT TOOTH LOCK	2
7J250-001	1/4 WASHER, SAE, PLTD	6	2A017-501-175	SPACER, 50 OD X 25 ID X 175	2
7P375-625	3/8 NPT X 5/8 HOSE BARB	1	7P312-020	5/16 FORD 90° FUEL FTG PLSTC	2
7R002-010	#10 SAE TYPE F SS HOSE CLAMP	2	4LGE145-010	FUEL FEED HOSE ASY, LYSH 62L	1
7R007-002	NYLON RATCHET CLAMP .90"	2	4GR110-110	ASSY, DAMPER PIN, LS1-LS2-LS6	1
7U033-000	5/8" PCV HOSE	2	4GR010-110	GUIDE, DWL PIN IST, C5	1
			7C016-010	BOLT, OEM LS1, M16-2.0	1
			7C016-100	BOLT, M16-2.0X100MM SHCS	1
			7U250-019	DOWEL PIN, 1/4D X 1/2L	1

PARTS LIST (CONT'D)

IMPORTANT: Before beginning installation, verify that all parts are included in the kit. Report any shortages or damaged parts immediately.

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
8N106-180	WATER COOLER ASSY, LYSH CAM SS 1				
8N006-020	WATER COOLER, DUAL PASS	1			
8N010-380	BRKT, PASS, HEAT EXCHGR, 2010	1			
8N010-390	BRKT, DRVR, HEAT EXCHGR, 2010	1			
7R007-001	NYLON RATCHET CLAMP 1-1/8"	2			
7U038-012	HOSE, 3/4 DIA 90°, 4 X 12 LEGS	2			
7J250-001	1/4 WASHER, SAE, PLTD	4			
7A250-051	1/4-20 X .50 HHCS GR5 ZINC PLT	4			
8N105-210	WATER TANK ASSY, LYSH CAM SS 1				
7U038-000	3/4" HEATER HOSE	10			
7R007-001	NYLON RATCHET CLAMP 1-1/8"	12			
7U038-012	HOSE, 3/4 DIA 90°, 4 X 12 LEGS	1			
7P375-075	3/4" HOSE BARB UNION, BRASS	3			
7P500-075	1/2NPT X 3/4 HOSE FIT STRT NIC	1			
7P500-034	1/2NPT X 3/4 BARB 90°, NICKEL	1			
8N056-060	SURGE TANK, PLASTIC	1			
8N055-050	PLASTIC CAP, SURGE TANK	1			
8N010-400	BRKT, MTG, SURGE TANK, '10 CAM	1			
8N055-030	TANK, WATER, TRIANGLE SHAPE	1			
4CK010-060	BRKT, WATER TANK MTG, JGC	1			
7E010-075	#12 X 3/4" SHT METL SCR W HEX	4			
7J250-001	1/4 WASHER, SAE, PLTD	9			
7P500-026	1/2NPT X 3/4 BARB 90° BRASS	2			
7A250-050	1/4-20 X .50 SHCS GR8 ZINC PLT	2			
7A250-051	1/4-20 X .50 HHCS GR5 ZINC PLT	4			
8N010-410	BRKT, MTG, BOSCH H2O PMP, 10 C	1			
7A250-039	1/4-20 X .375 BHCS	2			
009028	S/C LUBE, LYSHOLM 1600/2300	1			
5A003-060	TUNER, SCT, GM	1			



LYSHOLM® '10 - '11 CAMARO SS (TUNER KIT)

TWIN-SCREW SUPERCHARGER
AirPower® Group

Part No. 2310180

PARTS LIST

IMPORTANT:

Before beginning installation, verify that all parts are included in the kit. Report any shortages or damaged parts immediately.

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
2L218-070	S/C ASY, TUNER 2300 LYS,LS 821/823 1		8N107-005	WATER PUMP ASSY, 5GPM UNIV 1	
2L036-365-01	PULLEY, 6-RIB, 3.65, LYSHOLM	1	5W001-002	FUSE TAP	1
4LGE112-010	INLET AIR, ASY, CAMARO SS 1		5W001-032	1/4" PLASTIC WIRE LOOM	60
7PS500-400	REDUCER, SILICONE, 5.0-4.0, BL	1	5W001-009	16-14GA MALE SLIDE INSULATED	1
7R002-064	#64 SAE TYPE F SS HOSE CLAMP	3	5W001-013	14-16 GA BUTT CONN BLU INSUL	4
7R002-080	#80 SAE TYPE F SS HOSE CLAMP	1	5W001-015	FUSE, BLADE TYPE 20 AMP	1
4LGE012-010	BOX, AIR INLET, 2010 CAMARO, L	1	5W001-022	T-TAP CONN,14-16 AWG	1
7C040-008	M4-.7X8MM SCHD SS	2	5W001-024	MINI ATC FUSE TAP	1
7J250-001	1/4 WASHER, SAE, PLTD	4	5W001-041	12-10GA MALE SLIDE INSULATED	2
7F250-021	1/4-20 NYLOCK NUT ZINC PLATED	4	5W001-043	12-10GA X 1/4" RING TERMINAL	3
7A250-053	1/4-20 X .50 BHCS TORX SECURI	4	5W001-050	HARNESS, FUEL INJ PLUG W/WIRES	1
8H040-400	AIR FILTER, 4" FLANGE, 12" LON	1	5W001-014	FUSE HOLDER 10 GA WIRE	1
7PS400-225	BUMP SLEEVE, "4 X 2.25, BLACK	1	7A250-050	1/4-20 X .50 SHCS GR8 ZINC PLT	2
7U030-030	1/4" VACUUM HOSE	3	7E010-075	#12 X 3/4" SHT METL SCRW HEX	3
7P125-109	FTG, 1/8NPT - 1/4 BARB, AL	1	7F250-021	1/4-20 NYLOCK NUT ZINC PLATED	2
7P250-045P	1/4 MALE NPT X 3/8 MALE BARB N	1	7J250-001	1/4 WASHER, SAE, PLTD	2
7A250-050	1/4-20 X .50 SHCS GR8 ZINC PLT	3	7U100-044	TIE WRAP, 4" NYLON	4
7J006-093	6MM WASHER, PLATED	3	7U100-055	TIE WRAP, 7.5" NYLON	6
4LGE010-050	BRKT, UPPER, AIR BOX, 2010 CAM	1	8F001-403	PUMP, WATER, BOSCH	1
4LGE010-060	BRKT, LOWER, AIR BOX, 2010 CAM	1	8F101-320	WATER PUMP RELAY ASSY	1
8A003-121	MAF, 3.8 I.D., LS LYSHOLM, BLK	1	8N010-060	BRACKET, BOSCH WATER PUMP	1
4LGE116-010	DRIVE ASY,CAMARO SS, '10-'11 1		5W001-011	16-14 GA RING TERM .26" HOLE	2
4LGE010-021	PLATE, TENSR, MOUNTING, LS LYS	1	5W001-017	12-10GA X 3/8" RING TERMINAL	1
4LGE010-031	MNTG PLT, IDLER, LS CAMARO LYS	1	5W001-037	12-10 GA BUTT CON, SHRNK TYPE	2
2A017-878-10	SPACER, .875 OD X 3.221 L, ANO	2	5W001-040	12-10GA FEMALE SLIDE INSULATED	2
2A017-750-10	SPACER, .75OD X 1.360 L, ANOD.	3	5W001-007	3/16" HEAT-SHRINK TUBING	0.83333
2A017-878-11	SPACER, .875 OD X .754 L, ANOD	5	5W001-025	FEM SLIDE,INSUL,MINI,22-16AWG	1
2A017-875-26	SPACER, .875 OD X .404 ID X .085	1	4LGE155-010	SUPPORT ASY,CAMARO SS, '10-'11 1	
4LGE017-011	SPCR, IDLER PILOT, LS CAMARO L	2	4LGE010-070	SHIELD, HEAT, IGN COIL, 2010 C	1
4LGE010-041	SUPPORT BRKT, CYL HEAD, LS CAM	1	7C060-020	M6 X 10 X 20MM HHCS ZN	1
4FA016-150	IDLER PULY,6RIB 3.5" FLANGED	2	7J006-093	6MM WASHER, PLATED	6
7C080-120	M8 X 1.25 X 120 HXHD ZN PLT	3	5W001-030	1 1/2" HEAT SHRINK	1
7C010-040	M10 X 1.5 X 40 HXHD CL8.8 ZN	3	5W001-082	SLEEVE, FLEX BRAID .75" NOM	4
7C010-055	M10 X 1.5 X 50 HXHD CL10.9	4	5W001-090	HARNESS, ETC EXT, CAMARO SS	1
7C010-090	M10 X 1.5 X 90 HXHD CL8.8	1	5W001-091	HARNESS, MAF/IAT BRKOUT, CAMAR	1
7C010-120	M10 X 1.50 X 120 HXHD, CL10.9	2	4LGE014-010	RELOCATION ASSY, HTR HOSE , CA	1
7J010-002	10MM WASHER, ZINC PLATED	10	4LGE010-080	COVER, COIL BRKT, PASS, CAMAR	1
2A046-073	BELT, 6 RIB X 107.32 EFFECT. L	1	7U031-018	5/16 EFI FUEL HSE HI-PSR	3.5
7G010-005	NUT, PEM, M10 X 1.5, ZINC SEL	4	7U031-018	5/16 EFI FUEL HSE HI-PSR	1.8
7C080-008	M8 X 1.25 X 8MM BHCS, ZINC, CL	1	7R004-003	STEPLESS CLAMP, 145-70	4
7J312-000	5/16 FLAT WASHER-SAE	4	4GR110-110	ASSY, DAMPER PIN, LS1-LS2-LS6	1
4GE155-030	REMOTE W.WASHER ASSY, '10-'11 1		7A250-050	1/4-20 X 50 SHCS GR8 ZINC PLT	3
4GE010-080	BRKT, WSHR RESVR, 2010 CAMARO	1	7J250-001	1/4 WASHER, SAE, PLTD	6
4GE010-090	BRKT, REMOTE FILL, 2010 CAMARO	1	7F250-021	1/4-20 NYLOCK NUT ZINC PLATED	3
4GE055-010	TANK "A", WSHR FLUID INTEGRAL,	1	7C060-028	STANDOFF, M6 X 10 M/F, 1175L	2
4GE055-020	CAP, THRD UNVENTED	1	7C060-027	M6 X 10 X 25 BUTN HD ZN PLT	2
4GE055-030	TANK, REMOTE FILL WSHR FLUID,	1	7C060-031	M6 X 10 X 30 BUTN HD ZN PLT	2
7A250-063	1/4-20 X .63 HHCS SS	6	7C060-017	M6 X 10 X 16 BUTN HD ZN PLT	2
7E010-050	#12 X 1/2 SHEET METAL SCREW	5	7J012-009	WASHER, #12 INT TOOTH LOCK	2
7J250-001	1/4 WASHER, SAE, PLTD	6	2A017-501-175	SPACER, 50 OD X 25 ID X 175	2
7P375-625	3/8 NPT X 5/8 HOSE BARB	1	7P312-020	5/16 FORD 90° FUEL FTG PLSTC	2
7R002-010	#10 SAE TYPE F SS HOSE CLAMP	2	4LGE145-010	FUEL FEED HOSE ASY, LYSH 62L	1
7R007-002	NYLON RATCHET CLAMP .90"	2	4GR110-110	ASSY, DAMPER PIN, LS1-LS2-LS6 1	
7U033-000	5/8" PCV HOSE	2	4GR010-110	GUIDE, DWL PIN IST, C5	1
			7C016-010	BOLT, OEM LS1, M16-2.0	1
			7C016-100	BOLT,M16-2.0X100MM SHCS	1
			7U250-019	DOWEL PIN,1/4D X 1/2L	1

PARTS LIST (CONT'D)

IMPORTANT: Before beginning installation, verify that all parts are included in the kit. Report any shortages or damaged parts immediately.

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
8N106-180 WATER COOLER ASSY, LYSH CAM SS 1					
8N006-020	WATER COOLER, DUAL PASS	1			
8N010-380	BRKT, PASS, HEAT EXCHGR, 2010	1			
8N010-390	BRKT, DRVR, HEAT EXCHGR, 2010	1			
7R007-001	NYLON RATCHET CLAMP 1-1/8"	2			
7U038-012	HOSE, 3/4 DIA 90°, 4 X 12 LEGS	2			
7J250-001	1/4 WASHER, SAE, PLTD	4			
7A250-051	1/4-20 X .50 HHCS GR5 ZINC PLT	4			
8N105-210 WATER TANK ASSY, LYSH CAM SS 1					
7U038-000	3/4" HEATER HOSE	10			
7R007-001	NYLON RATCHET CLAMP 1-1/8"	12			
7U038-012	HOSE, 3/4 DIA 90°, 4 X 12 LEGS	1			
7P375-075	3/4" HOSE BARB UNION, BRASS	3			
7P500-075	1/2NPT X 3/4 HOSE FIT STRT NIC	1			
7P500-034	1/2NPT X 3/4 BARB 90°, NICKEL	1			
8N056-060	SURGE TANK, PLASTIC	1			
8N055-050	PLASTIC CAP, SURGE TANK	1			
8N010-400	BRKT, MTG, SURGE TANK, '10 CAM	1			
8N055-030	TANK, WATER, TRIANGLE SHAPE	1			
4CK010-060	BRKT, WATER TANK MTG, JGC	1			
7E010-075	#12 X 3/4" SHT METL SCRW HEX	4			
7J250-001	1/4 WASHER, SAE, PLTD	9			
7P500-026	1/2NPT X 3/4 BARB 90° BRASS	2			
7A250-050	1/4-20 X .50 SHCS GR8 ZINC PLT	2			
7A250-051	1/4-20 X .50 HHCS GR5 ZINC PLT	4			
8N010-410	BRKT, MTG, BOSCH H2O PMP, 10 C	1			
7A250-039	1/4-20 X .375 BHCS	2			
009028	S/C LUBE, LYSHOLM 1600/2300	1			

1. PREPARATION / REMOVAL

A. Remove the Front Bumper Cover (FBC):

1. Remove the two (2) 10mm-headed screws from the bottom of the FBC.
2. Remove three (3) T20 Torx screws securing each splash guard to the FBC (6 total). These screws are located in the wheel wells just forward of the front wheels along the outer edge.
3. Remove two (2) of the plastic pins securing each splash guard to the inner fender structure (4 total). One is adjacent to the strut and the other is directly above the wheel.
4. Pull the splash shield away so it rests against the tire, revealing the fasteners at the leading edge of the fender as shown in Figure 1A.
5. Remove the four (4) 10mm-headed screws and one (1) 7mm-headed screw attaching the FBC to the leading edge of the fender on each side (See fig. 1B, LH side shown).
6. Disconnect the FBC electrical connector located between the passenger side driving light and headlight. Access the connector via the wheel well.
7. Remove the two (2) 10mm-headed screws and six (6) plastic pins along the top edge of the FBC.
8. Remove the FBC by sliding it forward and away from the car.

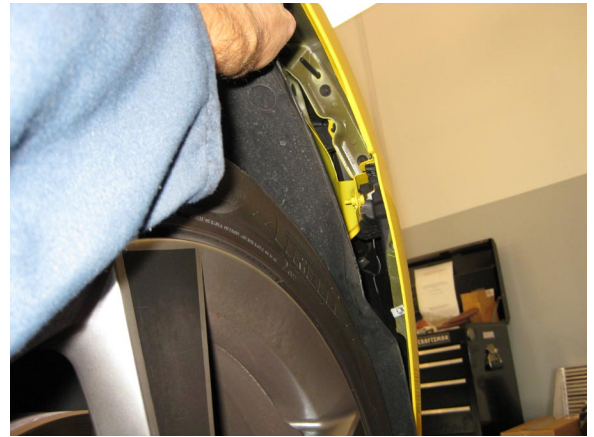


Fig 1A

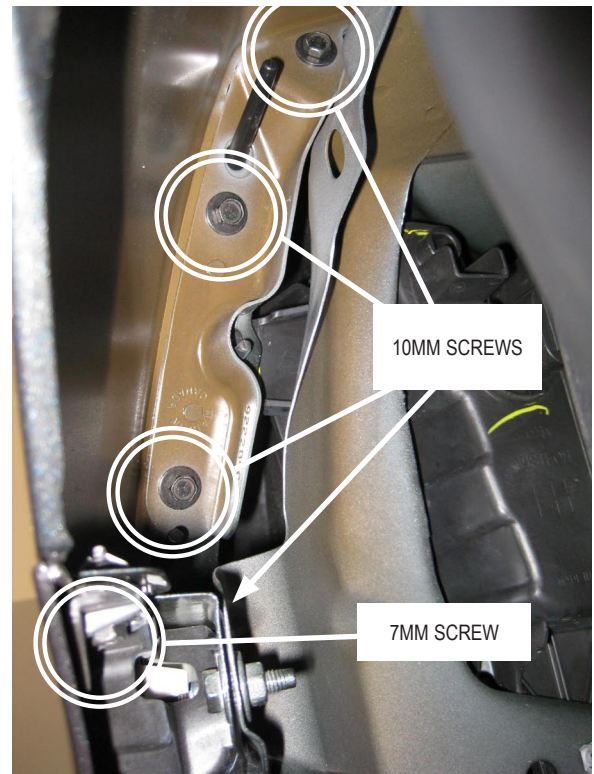


Fig 1B

- B. Disconnect the negative battery terminal (located in the trunk) using a 10mm socket. Remove the trunk carpet, loosen the large plastic wing nut in the center of the floor and lift the trunk floor out. Remove the tire repair kit to reveal the battery. See fig 1C.
- C. Remove the oil fill cap on the passenger side valve cover to allow removal of the engine cover. Lift the engine cover from the front and then pull it out toward the front of the vehicle. Temporarily reinstall the oil fill cap to prevent contamination.
- D. Remove the nut securing the black plastic engine cover support to the rear section of the intake manifold. Pivot the support upward and snap it off of the passenger side fuel rail. See fig 1D.
- E. Disconnect the MAF electrical connector from the meter in the intake air tube as shown in See fig. 1E.



Fig 1C



Fig 1D



Fig 1E

F. Air inlet removal

1. Disconnect the vent line running to the intake air tube from the front of the passenger side valve cover. See fig 1F.
2. Use an 8mm socket or flat-tip screwdriver to loosen the hose clamp securing the intake air tube to the throttle body and pull the tube away from the throttle body.
3. Remove the two 10mm nuts securing the air box as shown in Fig. 1G.
4. Pull the air box straight up to release it from the retaining grommet on the bottom and remove the entire assembly from the vehicle.
5. Use a 7mm socket to remove the MAF sensor element from the air box assembly as shown in Fig. 1H. Set aside for reinstallation in a later step



Fig 1F

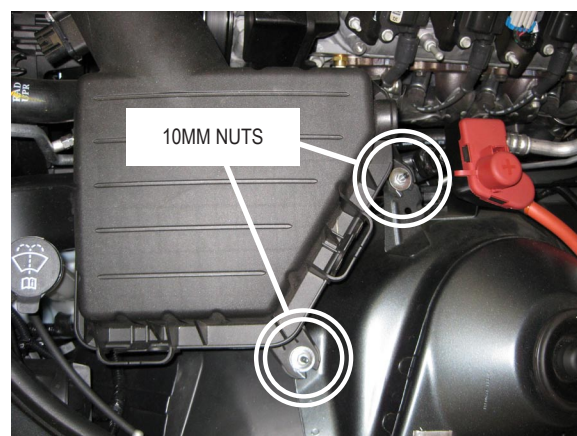


Fig 1G



Fig 1H

- G. Use a 15mm wrench or socket to release the tension from the 6-rib belt with the OEM belt tensioner as shown in Fig. 1I. Remove the belt and set aside for reinstallation in a later step. See fig 1I.
- H. Remove the six (6) 13mm-headed screws (3 per side) securing the front steel bumper beam. Set the screws and steel bumper beam aside for reinstallation in a later step. See fig 1J & 1K.

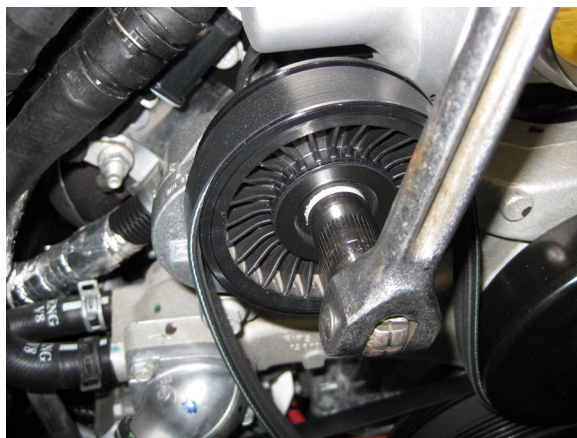


Fig 1I



Fig 1J

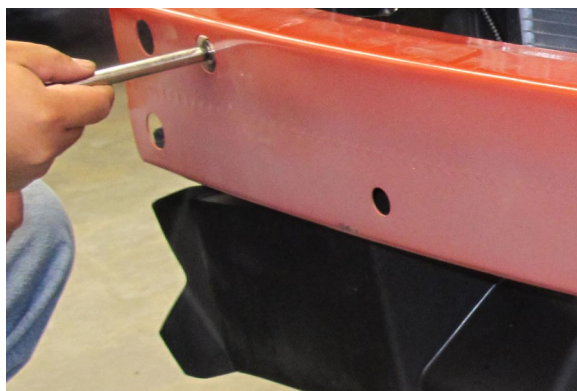


Fig 1K

- I. Remove the driver side upper radiator air shroud by removing the two body clips. See fig 1L.
- J. Drain the engine coolant into a clean container to be reused in a later step. There is a drain valve at the driver side bottom of the radiator. See fig 1M. Removing the radiator cap will improve flow.



Fig 1L



Fig 1M

- K. Once the coolant is drained, remove the factory clamps securing the heater hoses at the water pump and the firewall.

NOTE: It may be easier to remove the clamps at the firewall after intake manifold removal.

- L. Set hoses aside as they will not be reused.



Fig 1N



Fig 1O



Fig 1P

M. Washer reservoir removal

1. Locate the windshield washer reservoir (under the driver side headlight) and disconnect the electrical connector from the pump.
2. Drain the reservoir by removing the pump from its grommet and retaining saddle and catching the fluid in a large, clean open container or funnel as shown in Fig 1Q. Keep the fluid for later reuse.
3. Remove the washer hose from the 90° fitting near the pump and free it from the attachment points on the reservoir.
4. Remove the grommet from the reservoir and retain for later use.
5. Remove the three (3) 13mm-headed screws mounting the windshield washer reservoir and set the reservoir aside. See fig 1R. It will be replaced in a later step. Set one (1) of the 13mm headed screws aside for future use.



Fig 1Q



Fig 1R

- N. Disconnect the driver-side main coil bracket harness by releasing the green clip lock and separating the connector by lifting the connector tab. See fig 1S, 1T.
- O. Disconnect the four (4) driver-side spark plug wires from the bottom of each ignition coil. See fig 1U.

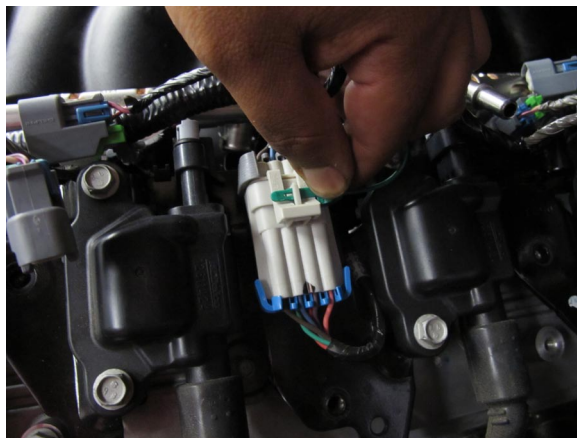


Fig 1S

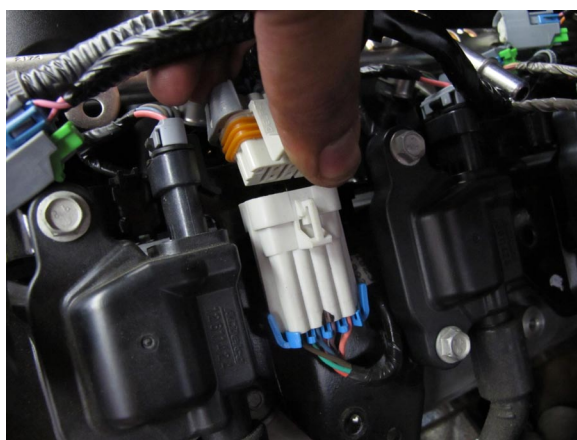


Fig 1T



Fig 1U

- P. Remove the five (5) fasteners securing the driver-side coil bracket to the valve cover. Remove coil pack assembly and set aside for future use. See fig 1V, 1W.
- Q. Remove the engine cover pedestal fastener from the driver-side valve cover and set aside for future use. See fig 1X.

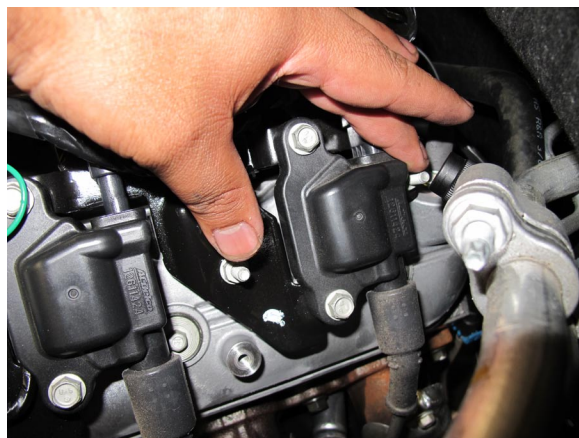


Fig 1V



Fig 1W



Fig 1X

- R. Disconnect the MAP Sensor from the manifold located at the front passenger-side just behind the throttle body. See fig 1Y.
- S. Disconnect the electrical plug connected to the EVAP Solenoid located to the front of the passenger-side cylinder head. See fig 1Z.
- T. Remove the check valve from the brake booster. (Automatic only: Also, disconnect the electrical connector attached to the brake booster check valve.) See fig 1AA.



Fig 1Y



Fig 1Z



Fig 1AA

- U. Disconnect both ends of the EVAP Line that runs from the EVAP solenoid to the intake manifold, just behind the driver-side of the throttle body. Set aside for future use. See fig 1AB & 1AC.
- V. Disconnect the electrical connector attached to the passenger-side of the throttle body. See fig 1AD.



Fig 1AB



Fig 1AC

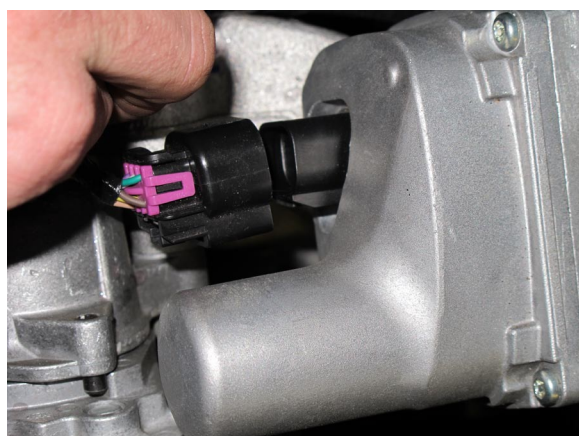


Fig 1AD

W. Throttle body removal

1. Remove the four (4) 10mm headed screws securing the throttle body to the manifold. See fig 1AE.
2. Remove the throttle body and green throttle body seal from intake manifold. Set aside throttle body, hardware and seal for future use. See fig 1AF.

X Disconnect both ends of the the breather line that attaches to the passenger side of the intake manifold just behind the throttle body. See fig 1AG.

1. (Manual transmission) Attach to lifter val-
ley cover.
2. (Automatic transmission) Attach to driver-
side valve cover.



Fig 1AE

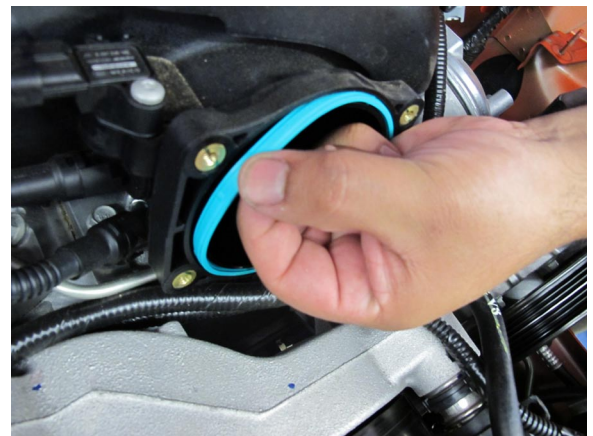


Fig 1AF



Fig 1AG

- Y. Remove the two (2) 15mm headed screws securing the belt tensioner to the water pump just in front of the passenger cylinder head. Remove and set tensioner aside for future use. See fig 1AH, 1AI.
- Z. Remove 15mm headed screw securing EVAP solenoid bracket to front of the passenger side cylinder head. Set bracket aside for future use. See fig 1AJ.

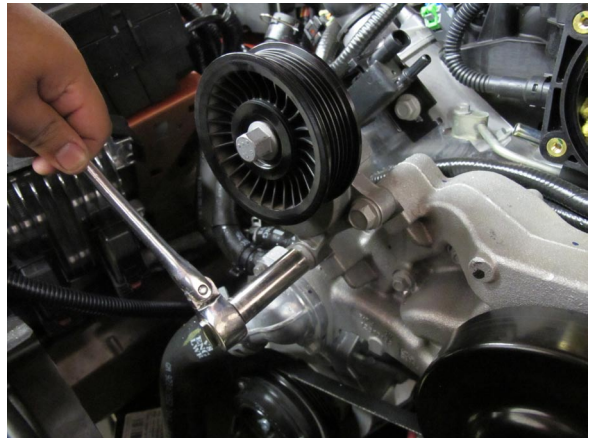


Fig 1AH

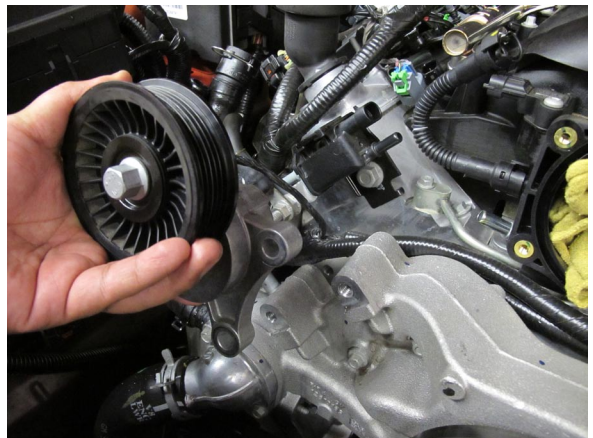


Fig 1AI



Fig 1AJ

AA. Remove the 15mm headed nut securing the engine ground wire to the stud mounted on the front of the passenger side cylinder head, near the exhaust manifold. See fig 1AK, 1AL.

AB. Remove the 15mm headed engine ground stud from the passenger side cylinder head and save for future use. See fig 1AM.



Fig 1AK



Fig 1AL

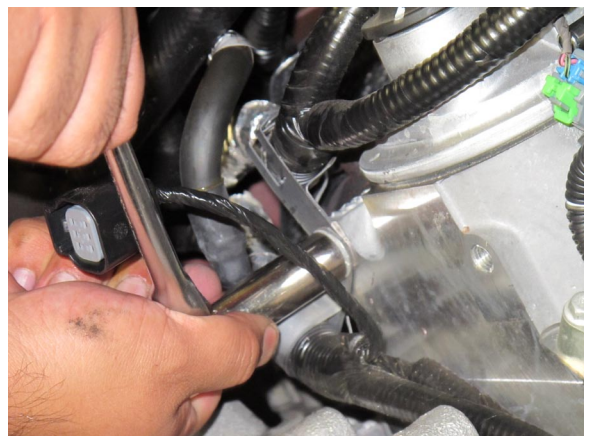


Fig 1AM

NOTE: Caution should be used when working on the fuel system. Fuel may be under high pressure. Fuel system work should be performed in a well ventilated area free of any possible ignition source. It is recommended that you have a fire extinguisher nearby.

AC. Remove the fuel tank cap. Relieve the fuel system pressure at the fuel rail by carefully depressing the schrader valve. Use a rag to cover the valve to avoid fuel spray. See fig 1AN.

AD. Disconnect the eight (8) fuel injector wiring clips from the injectors. See fig 1AO.

AE. Remove the fuel feed line assembly as follows:

1. Remove the safety clip from the 3/8 fuel feed line located on the side of the passenger strut tower below the ABS module.
2. Disconnect the 3/8 fuel feed line and the 5/16 EVAP Quick disconnect fittings from the feed lines on the side of the passenger strut tower using the appropriate disconnect tools.
3. Remove the nut securing the fuel feed line to the front passenger side fuel rail stud.
4. Remove the safety clip and disconnect the fuel feed line where it attaches to the fuel rail assembly on the manifold using the appropriate disconnect tool. Take care to absorb any fuel spillage.



Fig 1AN

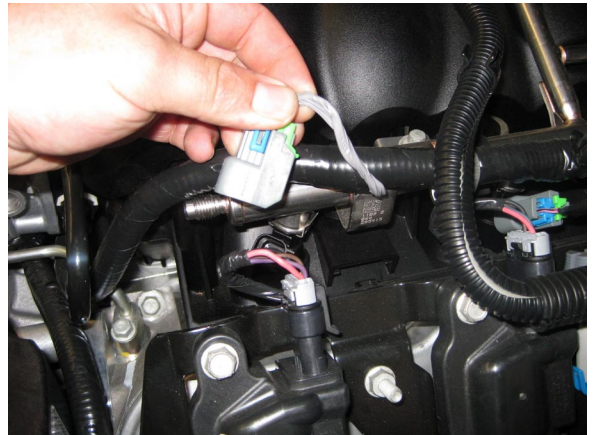


Fig 1AO

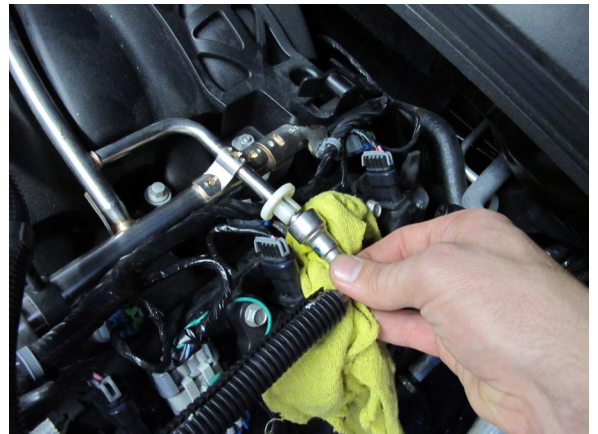


Fig 1AP

AF. Remove the eight (8) forward most of the ten (10) 8mm headed screws securing the intake manifold to the cylinder heads. To simplify removal of the intake manifold, use tape to temporarily hold the rear two screws in an elevated position. See fig 1AS.



Fig 1AQ



Fig 1AR



Fig 1AS

AG. With an assistant, raise the manifold up and out as shown. Be cautious to lift the brake booster hose up and around the engine oil pressure sensor to avoid damage to the connector. See fig 1AT, 1AU, 1AV.



Fig 1AT



Fig 1AU

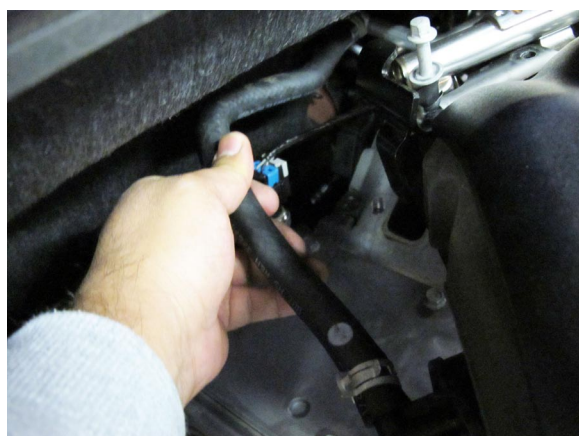


Fig 1AV

AH. Intake manifold component removal

1. Carefully remove all eight (8) intake port seals from the OEM intake manifold. Set aside for future use. See fig 1AW.
2. Using a Torx T25 to remove the MAP sensor located at the front of the OEM intake manifold. Set aside for future use. See fig 1AX.
3. Remove the brake booster line from the back port of the OEM intake manifold. Set aside for future use. See fig 1AY.

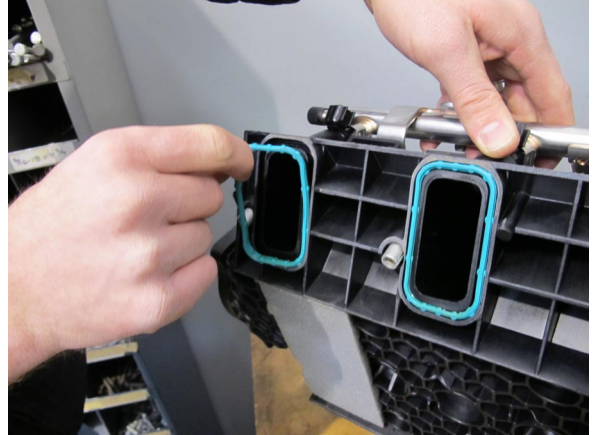


Fig 1AW



Fig 1AX



Fig 1AY

- AI. Carefully clean the cylinder head mating surfaces and lifter valley cover using a vacuum and carburetor/brake cleaner. Wipe dry and ensure that no debris enters the ports. Temporarily apply tape to the intake ports on the heads. See fig 1AZ.



Fig 1AZ

2. DAMPER/CRANK PINNING

- A. Lock the engine from rotating and remove the OEM damper pulley bolt.

NOTE: Automatic transmission cars can lock the engine through the trans inspection cover with a 15/16" open end wrench to one of the torque converter mounting bosses on the flex plate.

Manual transmission cars place car in 6th gear with wheels on the ground and apply parking brake.

- B. Remove the factory crank damper bolt using a 15/16" or 24mm socket. Set bolt aside as it will not be reused.
- C. Install the supplied drill guide with the raised section piloting in the damper bore. Temporarily secure in place by installing the supplied socket head cap screw. Do not over-tighten the screw as it may distort the drill guide (its purpose is just to hold the guide in place while drilling). See fig 2C.



Fig 2A

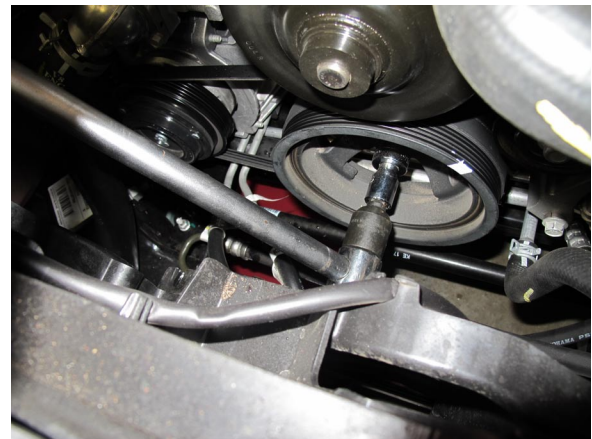


Fig 2B



Fig 2C

- D. Mark a 1/4" drill bit with tape or use a drill stop at a point 1-3/16" (~1.2") minimum from the tip of the drill. See fig 2D.
- E. Using an angle drill or small drill motor, drill into the crankshaft/damper hub assembly through the bushing in the drill guide, taking care to keep the tool perpendicular to the damper. Stop when the tape reaches the front of the drill guide. This should yield a hole depth of at least 1/2".
- F. Remove the socket head cap screw and drill guide. Carefully remove any metal chips from the area with compressed air. The drilled 1/4" hole should appear as in Fig. 2E.
- G. Install the supplied Ø1/4" x 1/2" long dowel pin into the drilled hole with the chamfered end pointed toward the front of the vehicle. See fig 2F.
- H. Verify that the dowel pin is recessed slightly from the machined portion of the damper face.



Fig 2D



Fig 2E



Fig 2F

I. Install the supplied new OEM damper retaining bolt as follows:

1. Lightly coat the threads of the new retaining bolt with red thread locker. Install and torque to 37 ft-lb. See fig 2G.
2. Using a ½" drive or larger breaker bar, tighten the retaining bolt an additional 120° or torque to 250 ft-lb. See fig 2H.

J. **Automatic Transmission:** "Unlock" the engine from turning by removing the previously-installed wrench holding the flex plate and replace the inspection cover.

Manual Transmission: Place the transmission in Neutral.



Fig 2G



Fig 2H

3. INSTALLATION PREPARATION

- A. Using a criss cross pattern starting from the center, remove one at a time the ten (10) 13mm headed screws securing the valley cover plate. Replace with the supplied M8 button head screws. See fig 3A, 3B.
- B. Install the previously removed OEM MAP sensor on to the front of the supercharger lower manifold, and secure with the supplied M6x1.0x16MM using a 4mm Allen key. See fig 3C.

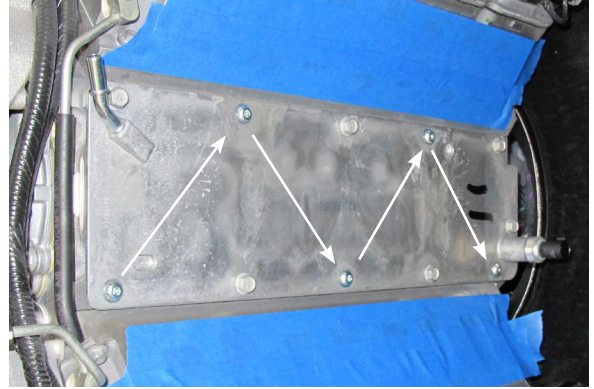


Fig 3A

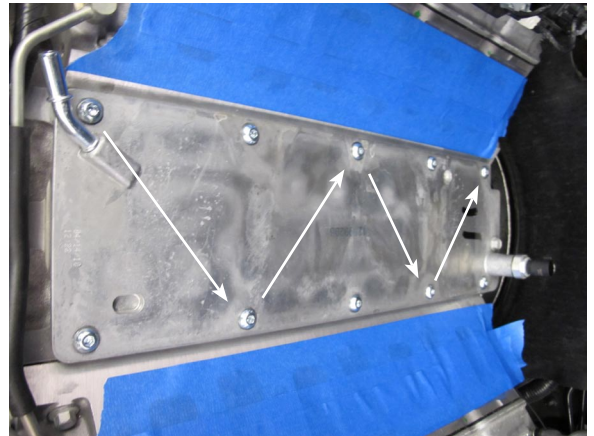


Fig 3B

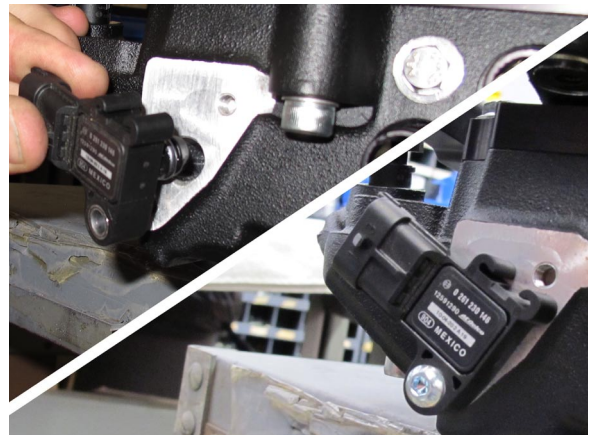


Fig 3C

- C. Install the supplied replacement heater coolant pipe assembly to heater core and water pump with supplied clamps and elbows as shown. See fig 3D, 3E.
- D. Apply a light coat of clean engine oil to the previously removed OEM throttle body seal and install it into the flange of the supercharger inlet duct. See fig 3F.



Fig 3D



Fig 3E



Fig 3F

- E. Using the OEM hardware, install the OEM throttle body onto the flange of the supercharger inlet duct, oriented as shown. See fig 3G.
- F. Apply a light coat of clean engine oil to the eight (8) previously removed intake manifold seals and install them into the supercharger lower manifold intake flange. See fig 3H, 3I.



Fig 3G



Fig 3H



Fig 3I

G. Locate the previously removed coil pack assembly and modify as follows:

1. Unclip the wiring harness conduit from the coil bracket. Removing the ignition coil adjacent to the main plug will aid in removal. See fig 3J.
2. Locate the supplied coil bracket relocation heat shield and place on coil bracket as shown.
3. Transfer the three (3) holes from the relocation heat shield onto the coil bracket. See fig 3K.
4. Using a 5/16" drill bit, drill through the three (3) marked locations on the coil bracket. The main connector plug may need to be removed to avoid damage during drilling. Remove burrs/sharp edges. See fig 3L.

NOTE: Use of a sharp drill and proper lubrication will aid in drilling through the steel OEM bracket.

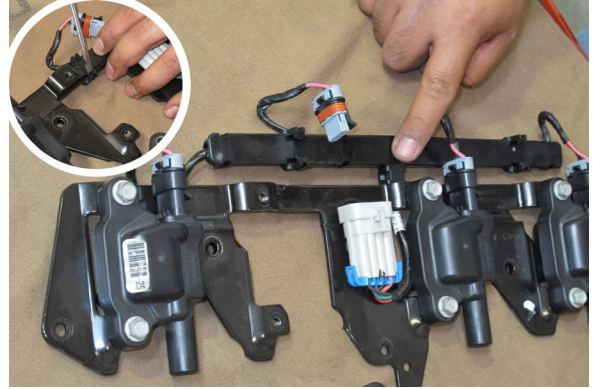


Fig 3J

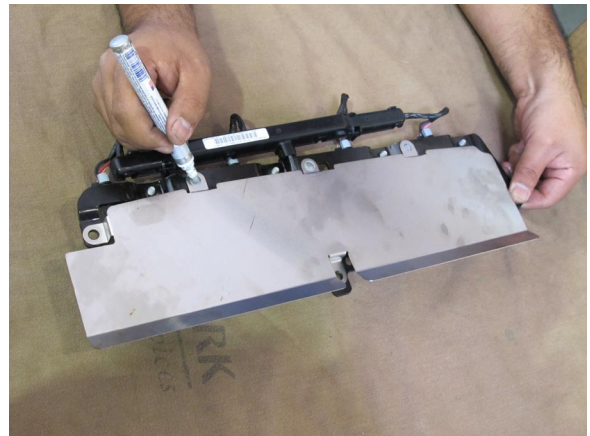


Fig 3K

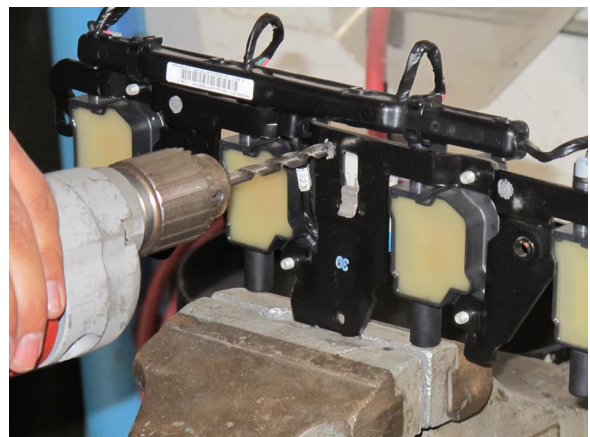


Fig 3L

- H. Using the supplied 1/4-20x.5 screws with washers, attach the relocation heat shield to the coil bracket assembly as shown using the 1/4-20 nylock nuts on the bottom side. See fig 3M.
- I. Install the relocation bracket assembly to the driver side valve cover using a supplied M6x1.0x20mm screw and two (2) factory screws. See fig 3N, 3O.

NOTE: Slight adjustment of the factory A/C line may be required for adequate clearance around the spark plug wires.



Fig3M

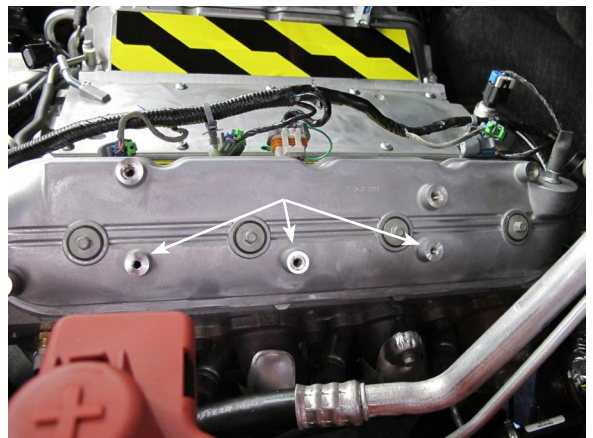


Fig 3N



Fig 3O

- J. Reconnect the factory spark plug wires to their respective ignition coil. You should hear two (2) distinct clicks ensuring a positive connection. See fig 3P.
- K. Reconnect the driver-side main coil bracket harness at the connector and secure connection with the green clip lock. See fig 3Q, 3R.



Fig 3P

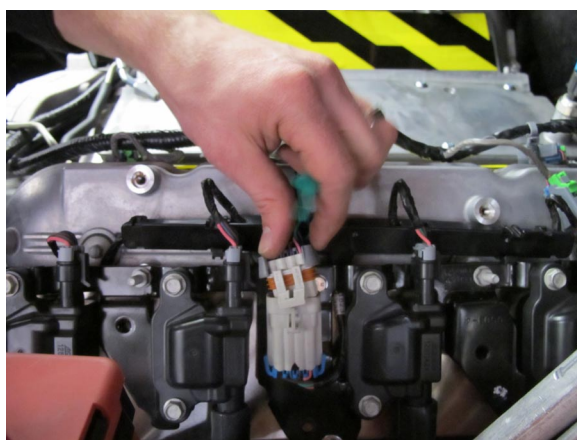


Fig 3Q



Fig 3R

4. WATER COOLER INSTALLATION

NOTE: Refer to fig 4T for general CAC layout and hose routing.

- A. Attach a supplied 4"x12" 90° molded rubber hose to the upper port of the water cooler pointing uphill back into the engine bay. Secure with supplied nylon ratchet clamp. See fig 4B, 4C.
- B. Locate another 4"x12" 90° molded rubber hose and trim 1.50" from the short leg. Discard the trimmed portion of the hose and attach the short leg to the bottom port of the water cooler, facing straight down. Secure with nylon ratchet clamp. See fig 4A, 4B.
- C. Loosely attach the supplied left and right water cooler mounting brackets using the hex head 1/4-20 x 0.5" screws with washers.



Fig 4A

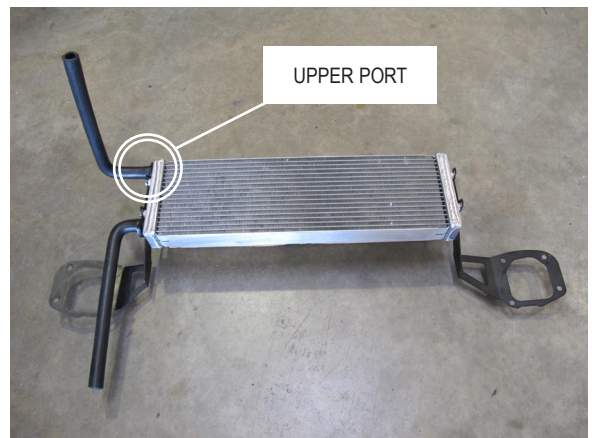


Fig 4B



Fig 4C

- D. While lining up each bracket with the front bumper mounting holes, re-install the front metal bumper beam with factory hardware, sandwiching the water cooler support brackets in between. Tighten all six (6) factory fasteners at this time. See fig 4D, 4E, 4F.



Fig 4D



Fig 4E



Fig 4F

- E. Adjust the height of the water cooler so that it is parallel to, and suspended above the lower support rail. Tighten the ¼-20 x 0.5" hardware. See fig 4G, 4H, 4I.



Fig 4G



Fig 4H



Fig 4I

- F. Locate the supplied triangle shaped water reservoir and two (2) ½ NPT 90° elbow fittings, and then assemble as shown. Use ¼-20x.5 screws with washers to secure the reservoir mounting bracket. See fig 4J, 4K.



Fig 4J



Fig 4K

- G. Position reservoir assembly on the passenger side frame seam in approximate position shown. Mark the mounting bracket hole locations and drill with an 11/64" drill bit. See fig 4L, 4M.
- H. Using two (2) #12 sheet metal screws, attach the reservoir to the frame rail. See fig 4N.



Fig 4L

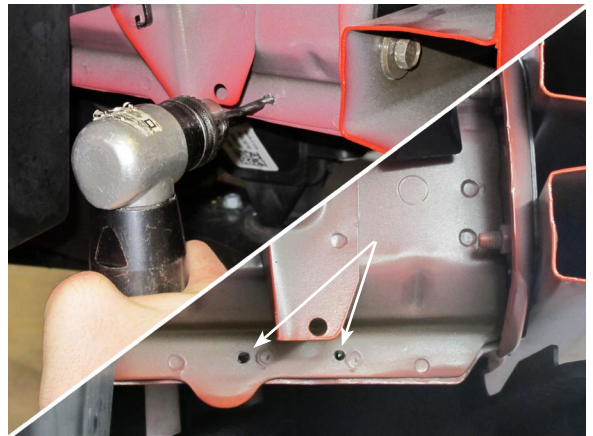


Fig 4M

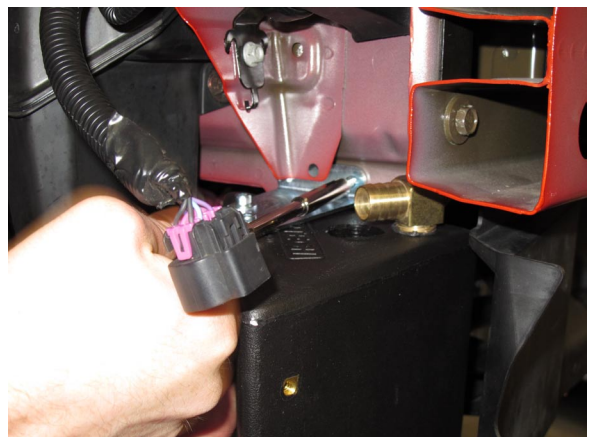


Fig 4N

- I. Locate a long length of supplied $\frac{3}{4}$ " hose and route the hose from the bottom port of the previously installed reservoir up and over the lower radiator core support and then across to the driver side to be connected with the water pump at a later step. See fig 4O, 4P, 4Q.

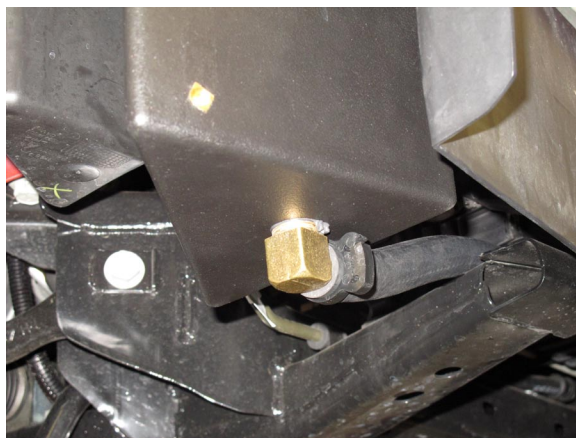


Fig 4O



Fig 4P



Fig 4Q

- J. Using a separate length of the supplied $\frac{3}{4}$ " hose, route the hose from the upper port of the reservoir up around the radiator overflow reservoir thru the power distribution box support frame, to be connected with the bottom surge tank port at a later step. See fig 4R.

NOTE: "Uphill" routing with no sharp bends of the hose sections will aid in purging air from the cooling system at initial startup.

- K. Trim hoses as necessary and secure with the supplied nylon ratchet clamps.



Fig 4R



Fig 4S

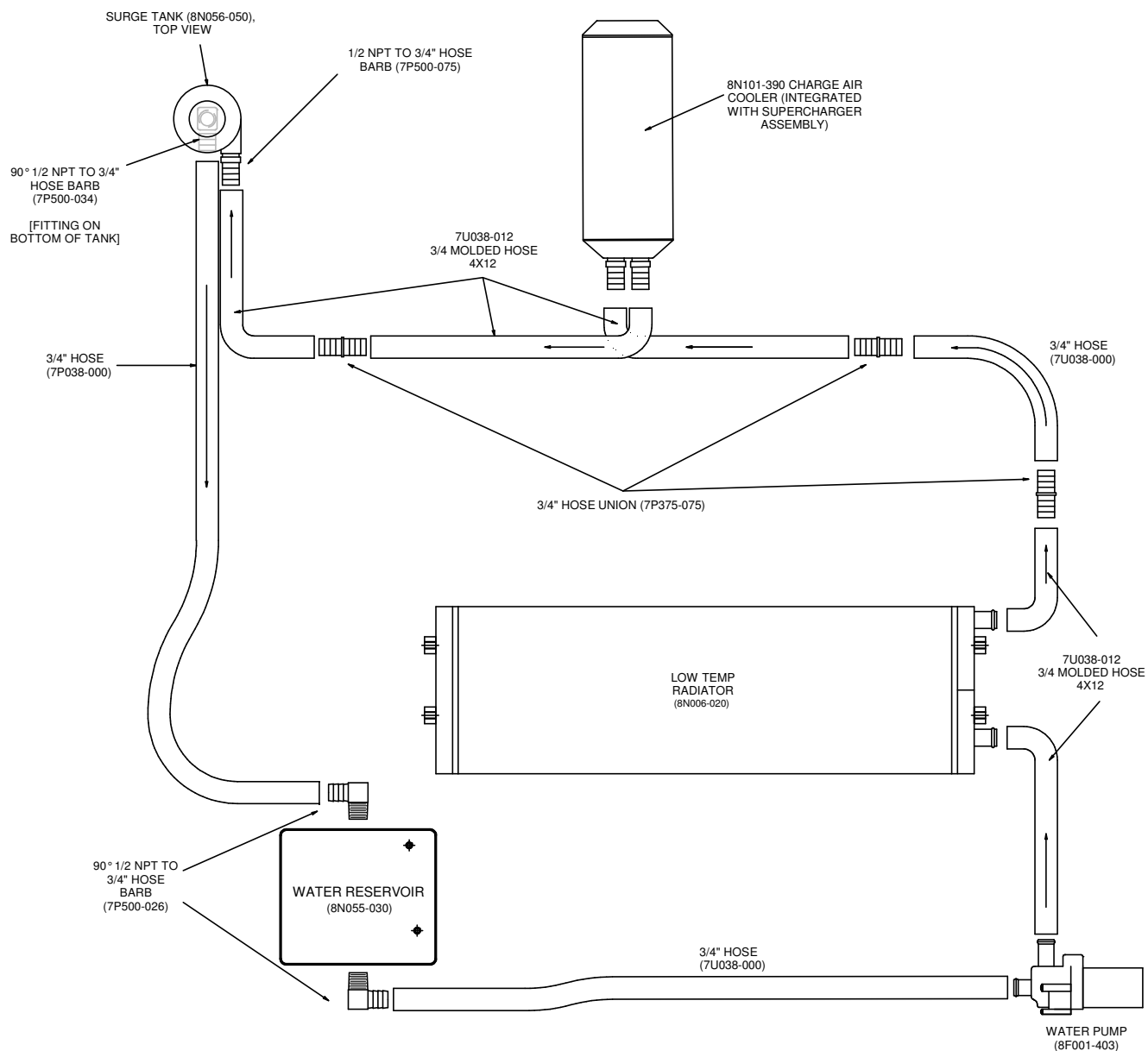


Fig 4T: CAC HOSE ROUTING DIAGRAM

5. WATER PUMP INSTALLATION

- A. Locate the water pump and attach to the water pump bracket as shown. See fig 5A.
- B. Using the supplied $\frac{1}{4}$ -20 x .50" screws, secure the water pump mount to the water pump bracket. See fig 5B.
- C. Mount the water pump to the driver side frame rail using one (1) of the OEM screws that was originally used to mount the OEM windshield washer bottle. See fig 5C.
- D. Trim the $\frac{3}{4}$ " hose coming from the bottom port of the reservoir (that is mounted on the passenger side) to connect with the water pump inlet. Secure with a supplied nylon ratchet clamp. See fig 5C.

NOTE: Ensure that there are no pinched sections in the hose attached to the inlet of the pump. Pump inlet restrictions may cause significant reduction in pump flow.

- E. Trim the hose from the bottom port of the water cooler to the water pump outlet and then secure with a nylon ratchet clamp.

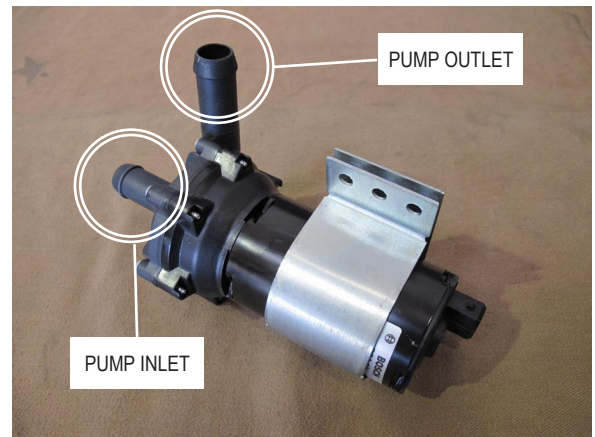


Fig 5A

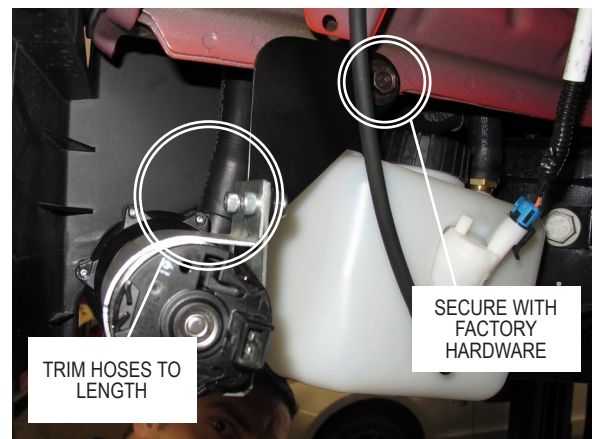


Fig 5B



Fig 5C

- F. Locate the 12-gage ground strap with two (2) eyelets attached and cut one (1) end off. Then connect a female spade connector as shown. See fig 5D.
- G. Replace the 16-gage ground wire from the #86 pin position of the supplied relay assembly with the modified 12-gage supplied wire.
- H. Locate the 10-gage fuse holder assembly and cut the wire in the middle as shown. Attach a ring terminal to one end and a female spade connector on the opposite end. See fig 5E.
- I. Replace the 12-gage short red wire from the #30 pin position of the supplied relay assembly with the modified 10-gage fuse assembly. See fig 5F.
- J. Install 20 amp fuse in fuse holder.



Fig 5D

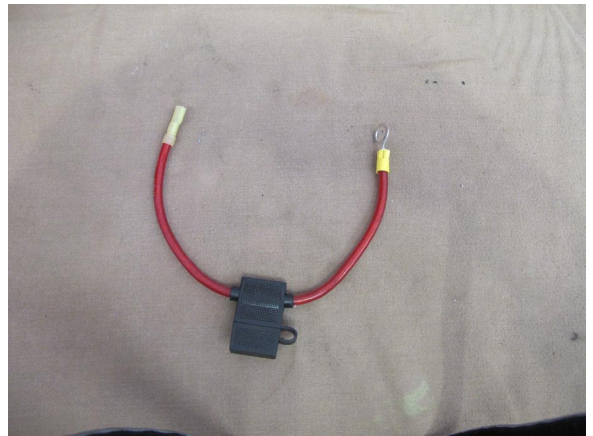


Fig 5E



Fig 5F

- K. Position relay on the passenger side upper radiator core support, adjacent to the coolant fill tube. Mark the position and drill a hole using an 11/64" drill bit. See fig 5G.
- L. Using #12 sheet metal screws, attach the relay ground and mount the relay. See fig 5H.

NOTE: Use a multimeter to verify a positive ground connection. If necessary remove the paint in the localized area of the ground connection.

- M. Route and trim the yellow relay wire to the #20 fuse (Engine power) on the power distribution block. Using a fuse tap, connect the wire to the fuse as shown. See fig 5I, 5J.



Fig 5G



Fig 5H



Fig 5I

- N. Using the OEM 13mm headed nut from the power distribution block, secure the fused wire. See fig 5J.
- O. Run the water pump power wire (long red 16 gage) down the side of the radiator, under the radiator core support to the water pump on the driver side. Secure with tie wraps and split loom. See fig 5K.

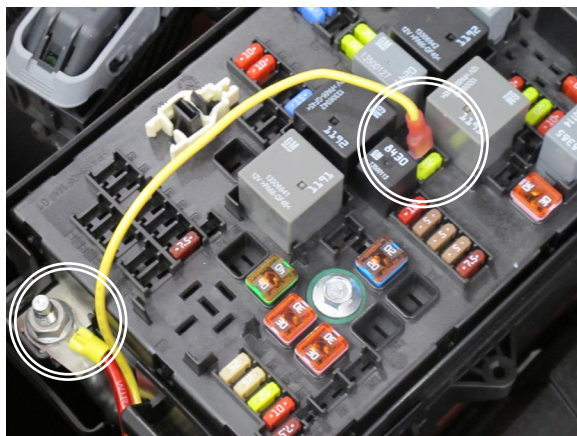


Fig 5J

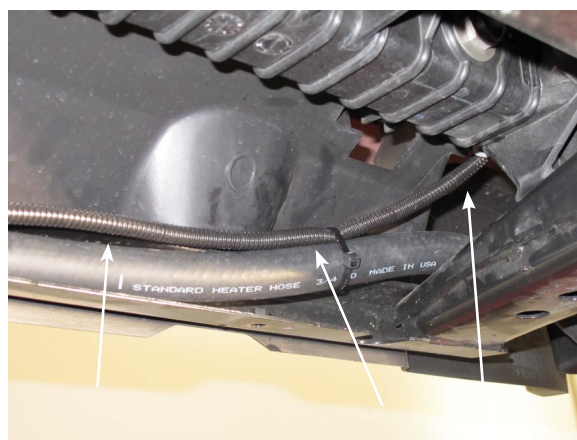


Fig 5K

- P. Use a butt connector to connect the power wire to the supplied water pump connector. Attach the other lead from the water pump connector to a suitable ground (OEM horn mounting screw) as pictured.
- Q. Connect the connector to the water pump. See fig 5M.

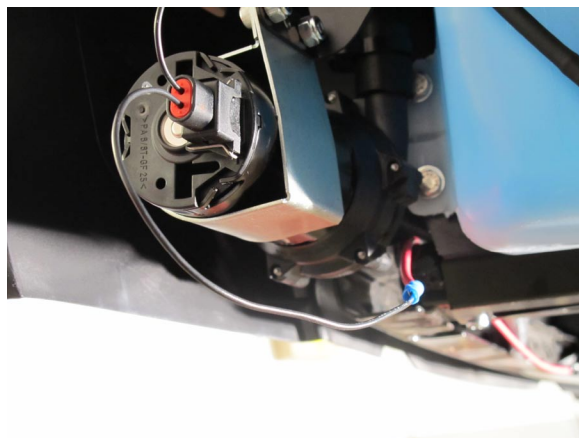


Fig 5L

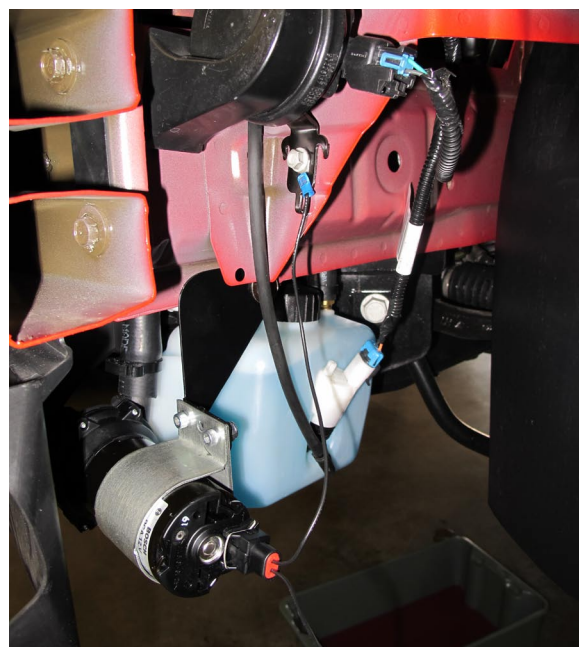


Fig 5M

6. WINDSHIELD WASHER RESERVOIR INSTALLATION

- A. Locate the supplied washer fluid tank and ensure that the straight 5/8" barb fitting is installed as shown in Fig. 6A.
- B. Install the previously-removed OEM washer pump and grommet into the similar location on the new reservoir. See fig. 6B.
- C. Install the supplied bracket onto the reservoir using the supplied 1/4-20 bolts and washers as shown in Fig. 6A.
- D. Install the plain cap onto the reservoir and tighten securely.
- E. Place the reservoir assembly onto the driver side frame rail with the bracket seating squarely against the underside as shown in Fig. 6D. Mark the position of the three (3) mounting holes onto the underside of the frame rail.



Fig 6A



Fig 6B

- F. Set the reservoir assembly aside and drill in the three marked locations with an 11/64" – 3/16" drill bit. See fig. 6C.
- G. Attach the supplied 5/8" hose to the barb on top of the reservoir and secure with a supplied hose clamp.

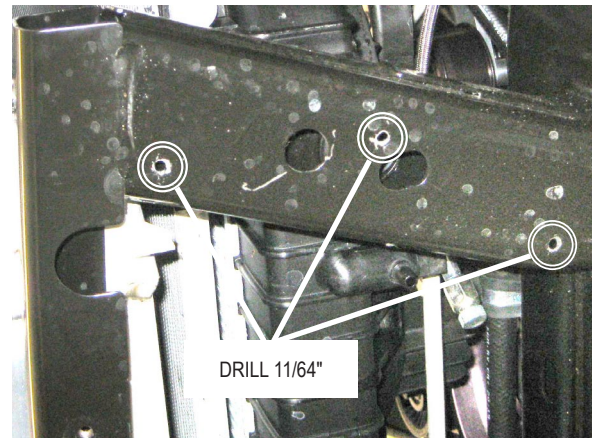


Fig 6C

- H. Routing the 5/8" hose upward, place the reservoir assembly back into position and secure with the supplied #12 phillips sheet metal screws. See fig. 6D.
- I. Locate the supplied remote fill spout with cap. Assemble it to the supplied mounting bracket using the supplied 1/4-20 bolts and washers as shown in Fig. 6E.
- J. Place the remote fill spout assembly in the location shown on the driver side radiator core support, ensuring there is adequate clearance for neighboring hoses. Mark the mounting hole locations and drill with an 11/64" drill bit.
- K. Mount the assembly as shown using the supplied #12 phillips sheet metal screws. See fig. 6E.



Fig 6D



Fig 6E

- L. Trim the 5/8" hose as necessary and connect it to the bottom of the remote fill spout, securing it with the included clamps. See fig. 6F.
- M. Reconnect the OEM electrical connector to the washer pump.
- N. Reconnect the washer fluid feed hose to the washer pump.



Fig 6F

7. BELT TENSIONER BRACKET INSTALLATION

- A. Remove the three (3) 10mm headed screws from the passenger side of the water pump. Clean all mounting bolt surfaces of the water pump and passenger side cylinder head at this time. See fig. 7A, 7B.
- B. Pre-assemble the supplied tensioner bracket and idler bracket using the spacers and hardware as shown. See fig 7C.

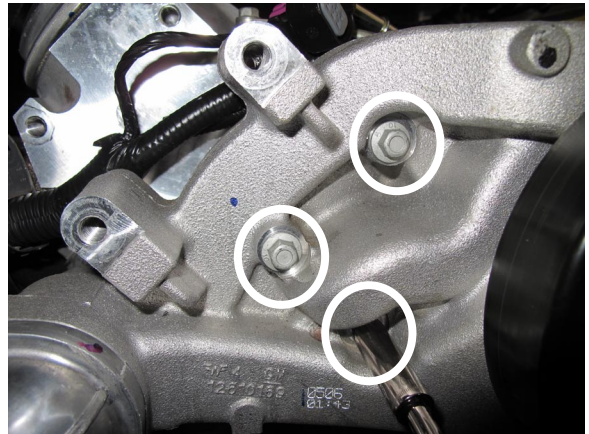


Fig 7A

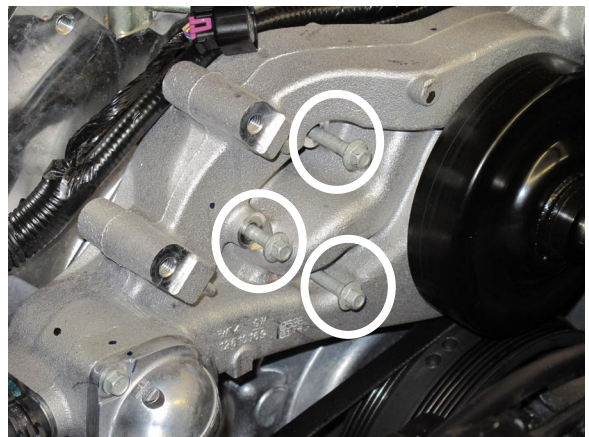


Fig 7B

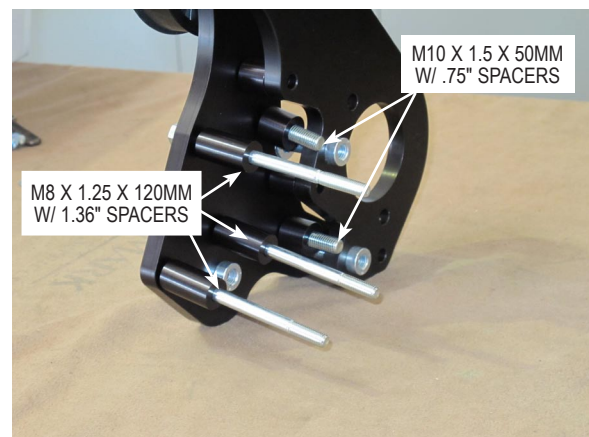


Fig 7C

- C. Mount the assembly onto the water pump and OEM tensioner mount. Start the three (3) M8x1.25x120mm screws that insert into the water pump, and then start the two (2) M10x1.5x50mm screws that insert into the OEM tensioner mount. Don't not tighten hardware at this time. See fig 7D, 7E, 7F.

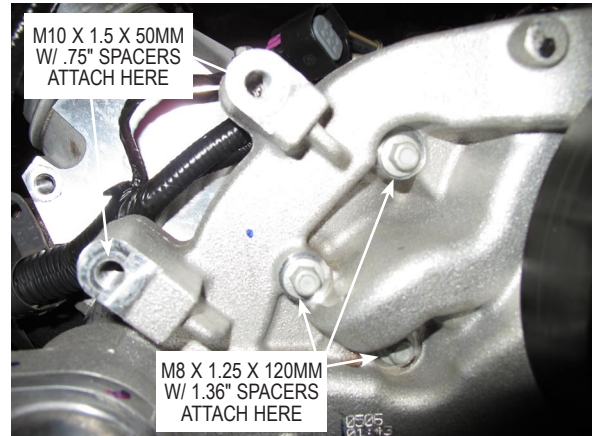


Fig 7D

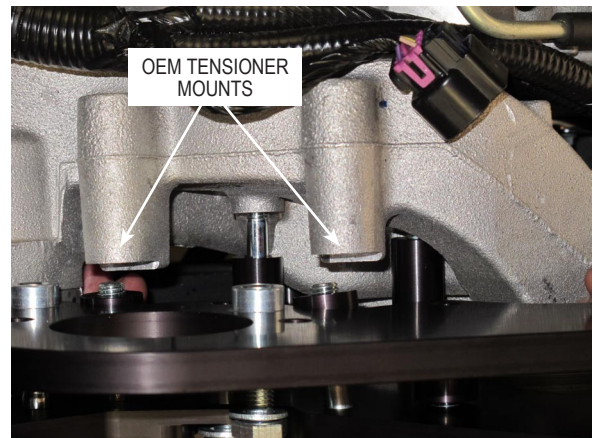


Fig 7E

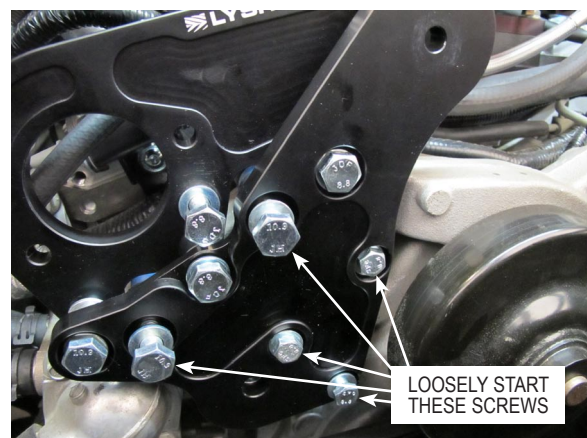


Fig 7F

- D. Insert the two (2) M10x1.50x120mm screws through the tensioner plate to sandwich the two (2) 3.22" long spacers between the tensioner plate and the grounding plate on the passenger side cylinder head as shown, then tighten screws. See fig 7G.
- E. Using the OEM M10 fastener and nut, reattach harness support clamps and ground wire as shown. See fig 7H, 7I.

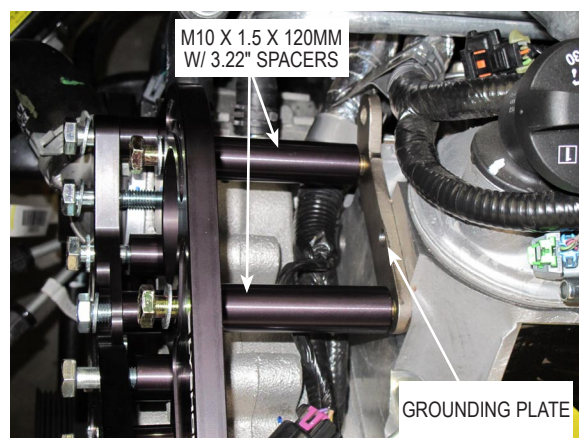


Fig 7G

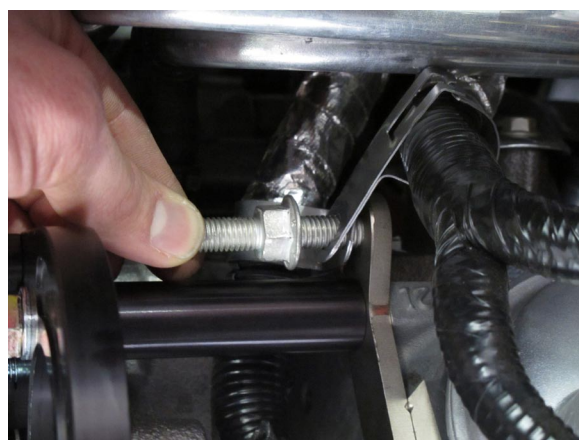


Fig 7H

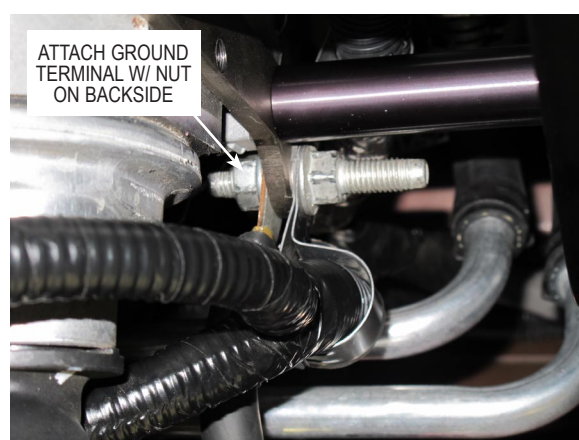


Fig 7I

- F. Mount OEM EVAP solenoid and bracket using the supplied M8x1.25 x 8mm button head with supplied washer to the ground plate, as shown. See fig 7K.

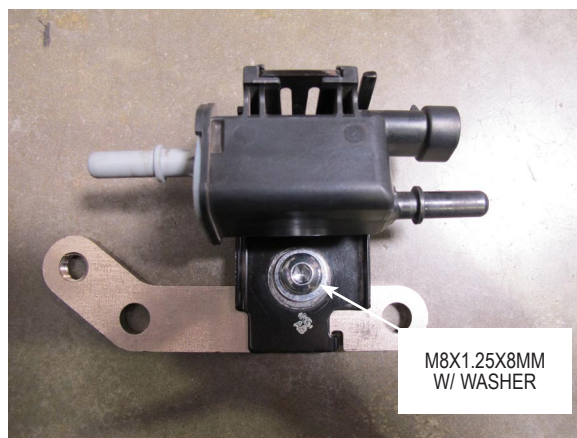


Fig 7J: EVAP Solenoid and bracket shown mounted to ground plate.

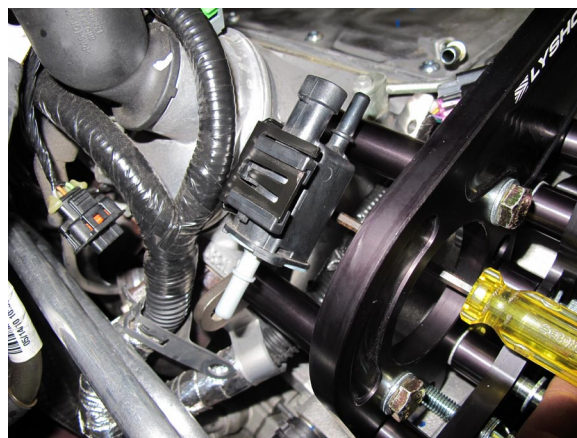


Fig 7K

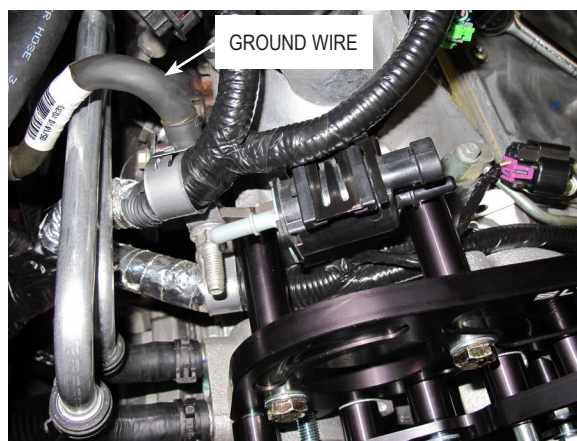


Fig 7L

- G. With all the bolts still loose on the brackets, install the OEM tensioner using the supplied M10x1.50 x 50mm screws. Sandwich the .085" spacer between the back of the idler bracket and the tensioner on the lower bolt. See fig 7M, 7N, 7O.

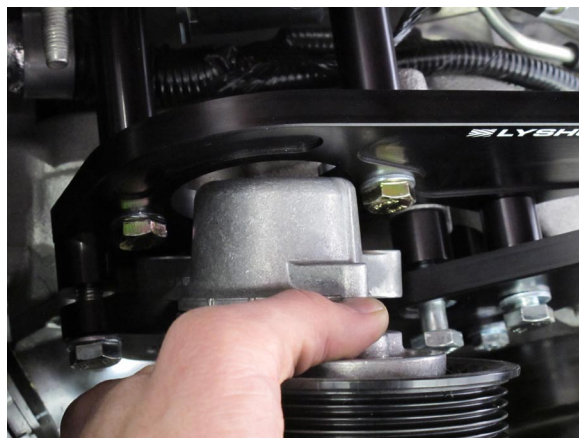


Fig 7M



Fig 7N

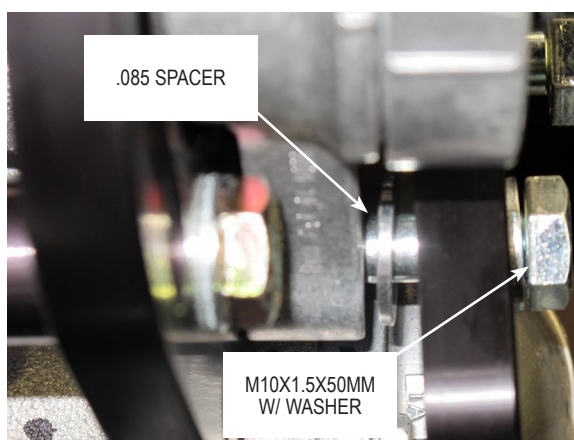


Fig 7O

- H. Assemble a supplied idler pulley as shown: Insert M10x1.50x90mm screw with washer through the idler dust shield, through the supplied idler, and then through the pilot spacer. See fig 7P.
- I. Install the supplied .75" thick spacer between the two mounting brackets in line with the top most hole. Insert the previously assembled idler and M10 screw through the brackets and spacer and then tighten into the installed PEM nut. See fig 7Q.
- J. Tighten all the screws mounted on the idler bracket. See fig 7R.

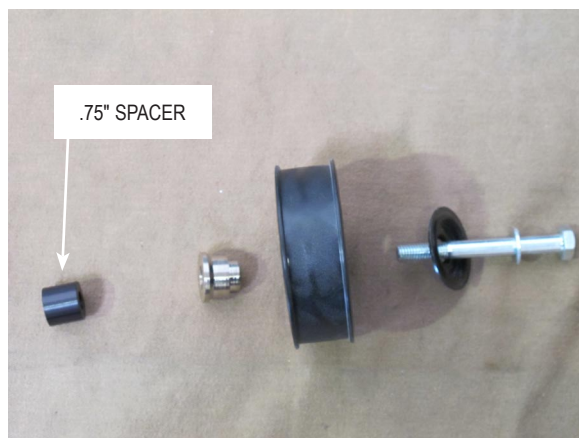


Fig 7P

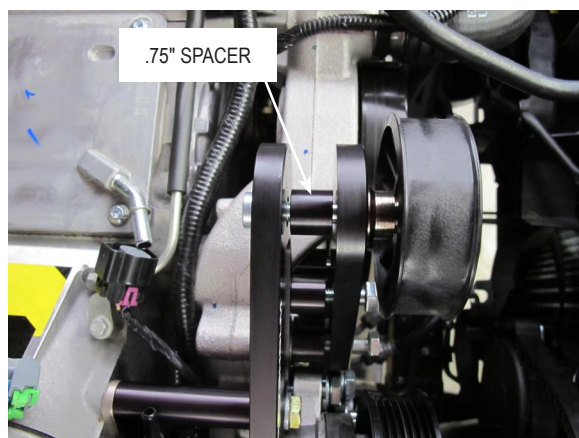


Fig 7Q

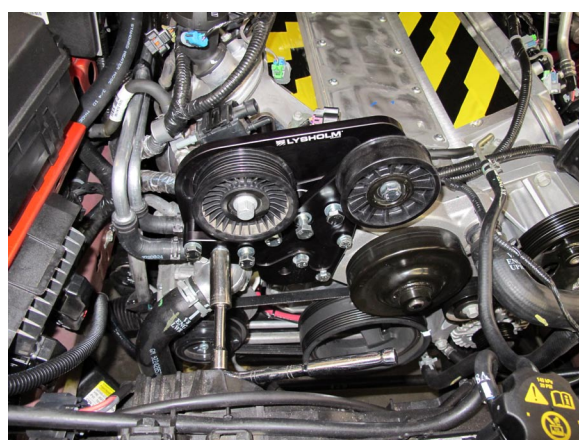


Fig 7R

- K. Assemble the other supplied idler pulley as shown: Insert M10x1.50x50mm screw with washer through the idler dust shield, through the supplied idler, and then through the pilot spacer. Insert idler and M10 screw thru hole next to thermostat housing on idler bracket, and then tighten. See fig 7S, 7T.

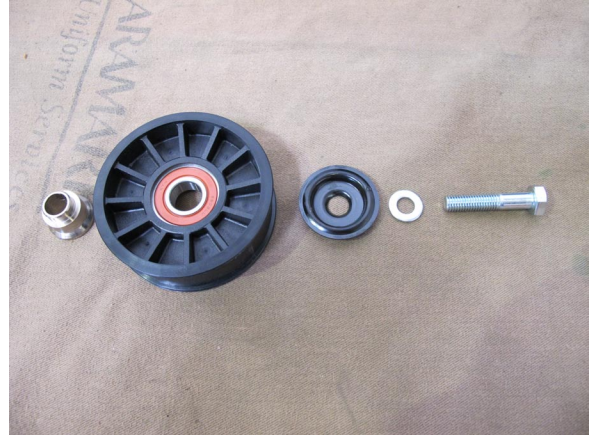


Fig 7S

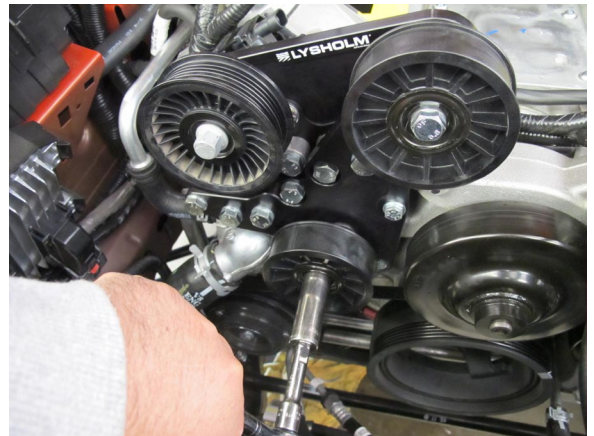


Fig 7T

8. SUPERCHARGER INSTALLATION

- A. Prior to installing the supercharger onto the engine, be sure to move all electrical and hoses clear of the cylinder head surfaces for the supercharger to sit in.
- B. Attach the supplied ETC (Electronic Throttle Control) extension and MAF/IAT harness to the OEM harness connectors. Route the IAT connector to the rear of the engine to be connected at a later point. See fig 8A, 8B, 8C.



Fig 8A



Fig 8B



Fig 8C

- C. With an assistant, carefully lower the supercharger assembly on to the engine as shown.

NOTE: Remove tape from intake ports if previously used to seal cylinder heads from debris.

- D. Connect the IAT sensor harness as the supercharger is lowered into place.
- E. Ensure the vacuum lines are not pinched between the cowl and the supercharger inlet.

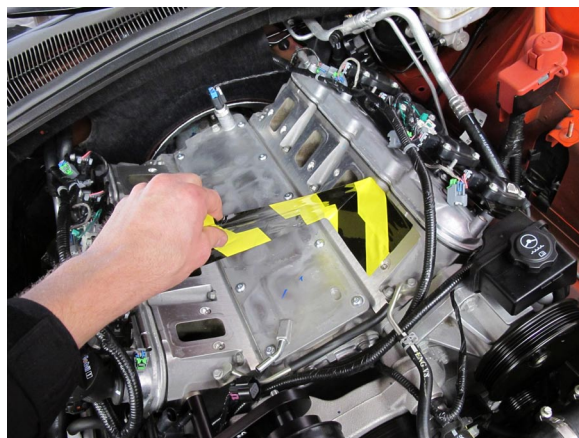


Fig 8D

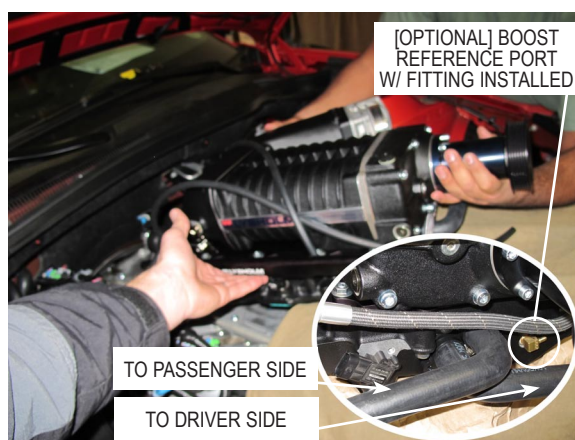


Fig 8E

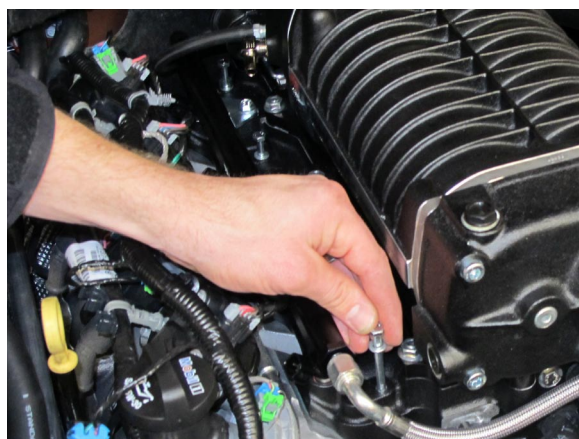


Fig 8F

F. The supercharger should come to rest on the pre-installed alignment guides which will prevent the supercharger from moving forward or backward. Once it is seated in this position, insert the remaining of the ten (10) M6x1.0 x 75mm long screws (five (5) per side) and start each of them through the manifold. Once each screw has been started by hand, torque all ten (10) M6 screws to 95-100 in/lbs evenly in a criss cross pattern starting from the center and going outward. See fig 8F, 8G, 8H.

G. Slide the OEM injector harness below the injector connectors, as close to the manifold as possible. Be sure to route the electrical injector connectors under and out around the harness to ensure that the connections have adequate slack. See fig 8I.

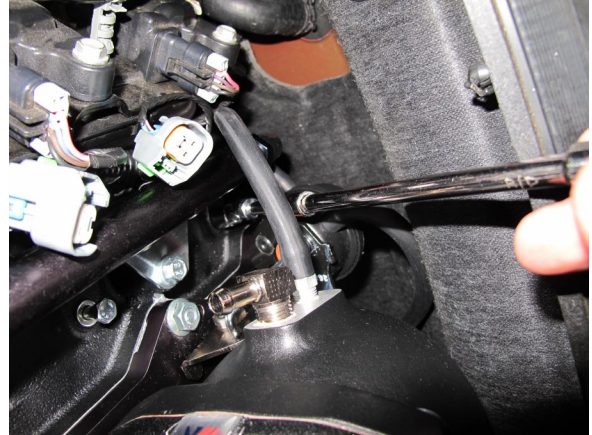


Fig 8G



Fig 8H

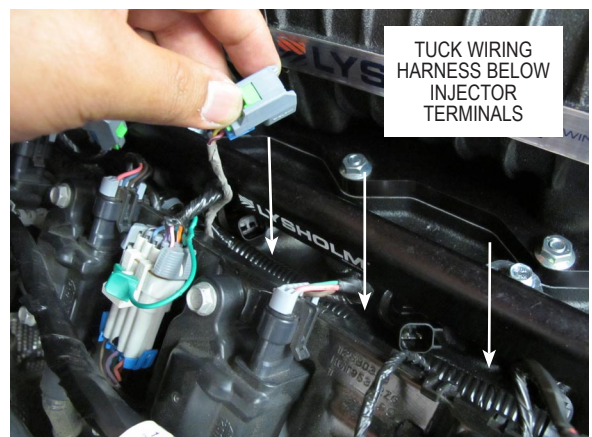


Fig 8I

H. Connect all eight (8) fuel injector connectors.

NOTE: You may need to rotate the injector under the fuel rail to slide the connector up and onto the fuel injector connector to ensure a positive connection.

- I. Locate the supplied fuel feed line and connect to the hard fuel supply line on the frame rail. Retain with OEM retaining clip. See fig 8K.
- J. Connect the other end of the fuel feed line to the back of the passenger side fuel rail. Ensure that the fuel feed line is securely tightened. See fig 8L.



Fig 8J



Fig 8K



Fig 8L

K. Modify the EVAP line that runs from the passenger side strut tower to the inlet side (black side) of the EVAP solenoid as follows:

1. Remove the 45° quick disconnect fitting from the factory evap line by carefully cutting the hose along the fitting using a utility knife. See fig 8N.
2. Using a 41.5" length of supplied 5/16" emissions hose, attach the supplied 90° quick disconnect fitting to one end and secure using a supplied 14.5 stepless clamp.
3. On the opposite end of the 5/16" hose attach the previously removed 45° quick disconnect fitting to the hose and secure using a supplied 14.5 stepless clamp.
4. Connect the EVAP line to the line on the frame rail, adjacent to the fuel feed line.
5. Route the line toward the rear of the car around the coolant lines located at the fire wall and back up to the front of the vehicle along the fuel rail. Secure the line as necessary with the supplied tie wraps.

L. Connect the 45° quick disconnect to the inlet side (black side) of the EVAP solenoid.



Fig 8M



Fig 8N

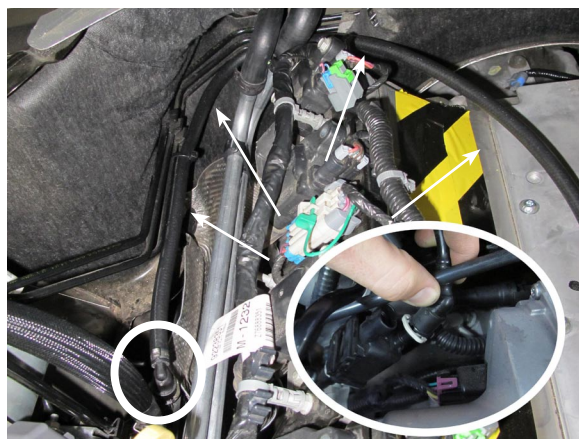


Fig 8O

- M. Connect the MAP sensor connector to the MAP sensor at the front of the lower manifold. See fig 8P.
- N. Connect the EVAP connector to the EVAP solenoid. See fig 8Q.
- O. Connect the ETC extension harness to the throttle body. See fig 8R.

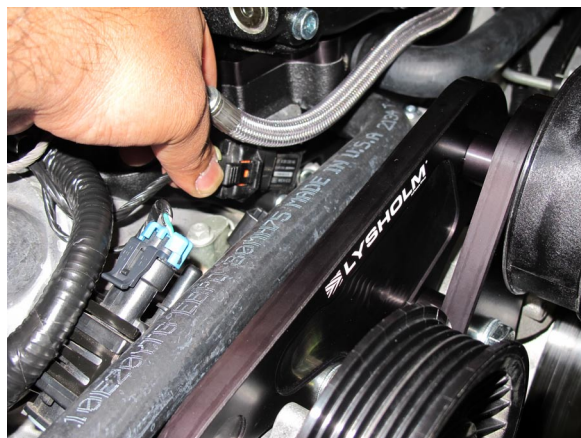


Fig 8P



Fig 8Q



Fig 8R

- P. Locate the supplied serpentine belt and route it as shown. See fig 8S, 8T.
- Q. Cut a 13" long section of the supplied $\frac{3}{4}$ " heater hose, and then attach a $\frac{3}{4}$ " union on both sides. Secure with nylon ratchet clamps.
- R. Attach one end of the previously assembled hose to the water cooler outlet hose then secure with a nylon ratchet clamp. See fig 8U.



Fig 8S



Fig 8T



Fig 8U

- S. Trim to fit approximately 4.5" from the driver side supercharger hose and attach the other end of the previously assembled hose then secure with a nylon ratchet clamp. See fig 8V, 8W.
- T. Locate the surge tank and nickel plated fittings. Using thread sealant, attach the 90° fitting to the bottom of the surge tank then attach the straight fitting to the side of the tank. Ensure the bottom fitting is pointed in the same direction as the straight fitting as shown. See fig 8X.



Fig 8V

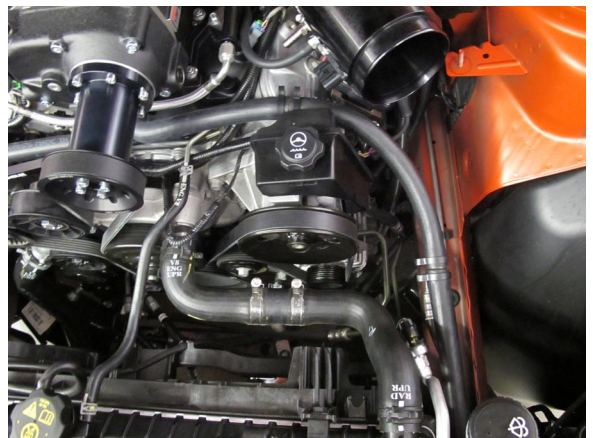


Fig 8W

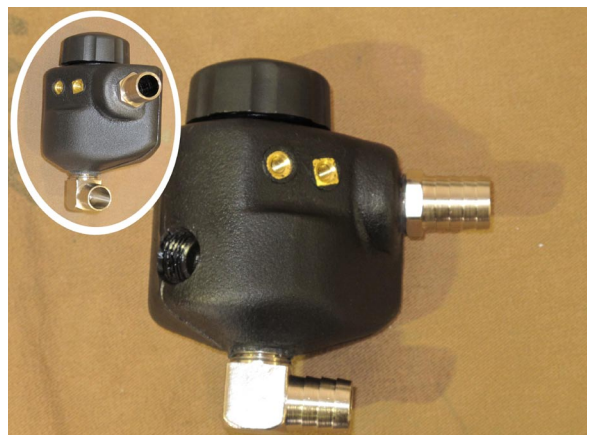


Fig 8X

- U. Pull away the cowl weather stripping from the passenger side engine bay. See fig 8Y.
- V. Remove the three (3) body clips, and then pull the cowl trim panel up and forward away from the windshield. See fig 8Z.



Fig 8Y



Fig 8Z



Fig 8AA

- W. Temporarily position the surge tank bracket onto the vehicle as shown and mark the hole locations with a punch. See fig 8AB.
- X. Use a 1/4" drill bit and drill out the holes on the cowl.
- Y. Mount the bracket on the underside of the cowl using the two (2) supplied 1/4x.375" button head screws. See fig 8AC.

NOTE: Do not use washer under the button head screws.

- Z. Mount the surge tank to the bracket using the two (2) supplied 1/4-20-.5" socket head cap screws.
- AA. Re-install the cowl trim panel and re-insert the three body clips previously removed. Reattach the cowl weather stripping.
- AB. Trim the previously installed 3/4" hose coming up from under the power distribution block and attach it to the bottom fitting on the surge tank. Secure hose using a nylon ratchet clamp. See fig 8AD.



Fig 8AB



Fig 8AC



Fig 8AD

AC. Attach a section of $\frac{3}{4}$ " hose to the side fitting on the surge tank and secure with a nylon ratchet clamp.

AD. Insert a $\frac{3}{4}$ hose union on the other end of the $\frac{3}{4}$ hose to attach to the passenger side cooler hose coming out of the supercharger. Then secure with a supplied nylon ratchet clamp. See fig 8AE.

AE. Trim the passenger side CAC hose and connect to the surge tank hose with a nylon ratchet clamp. See fig 8AG.

NOTE: Trim the hoses to length such that they travel in smooth arcs free from kinks and away from hot parts and sharp edges. Ensure adequate slack to allow for moderate engine movement.

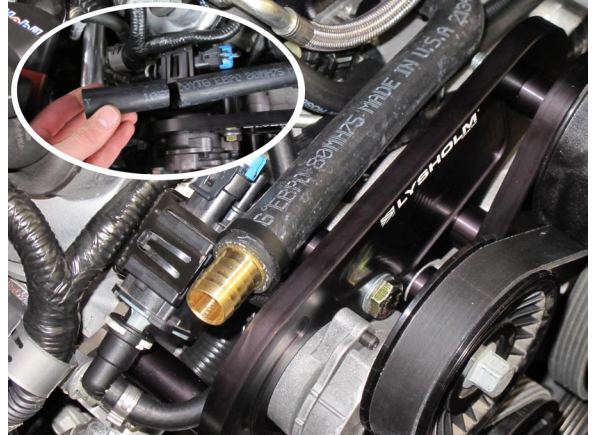


Fig 8AE

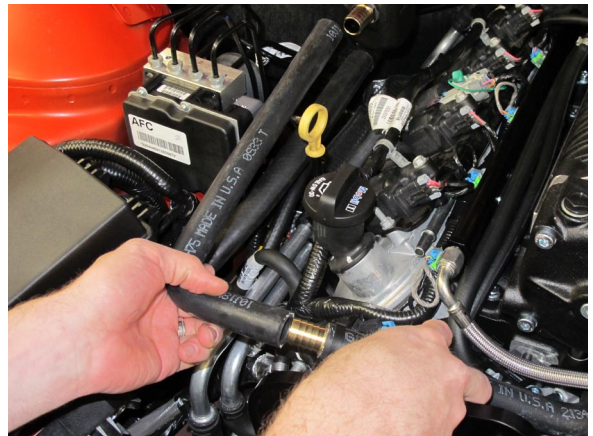


Fig 8AF



Fig 8AG

AF. Locate the supplied MAF housing, and install the previously removed OEM MAF sensor module into the housing using the supplied M4x.7x8mm screws. Be sure to align the flow direction arrow printed on the MAF sensor with the MAF housing, and that they point toward the throttle body once installed. Confirm that the supplied 1/4NPT X 3/8 barb and 1/8NPT x 1/4 barb fittings are securely installed in the MAF housing with proper thread sealant. See fig 8AH.

AG. Using the supplied 4" hump hose coupler with two (2) supplied #64 hose clamps, attach the MAF housing to the throttle body and orient as shown. See fig 8AI.

NOTE: Failure to properly install this device can result in engine damage or poor fuel economy.

AH. Locate a piece of 1/4" vacuum line and connect one end to the lower port on the bypass actuator (marked with "P") and route it behind the supercharger and thru to the MAF housing. Connect hose to the aluminum fitting adjacent to the MAF sensor mount.

AI. Locate the previously installed MAF/IAT harness. Ensure the IAT connector end of the harness is cleanly routed along the driverside fuel rail and back toward the IAT sensor located on the passenger-side rear of the lower supercharger manifold just below the bypass actuator. Confirm the connector is attached to the IAT sensor.

AK. Connect the MAF connector of the MAF/IAT harness to the MAF sensor installed in the housing.

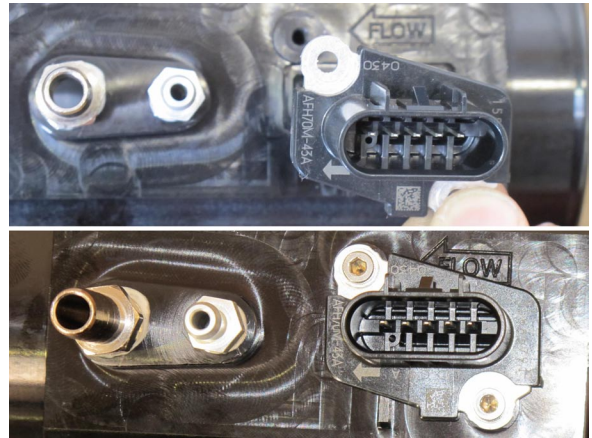


Fig 8AH

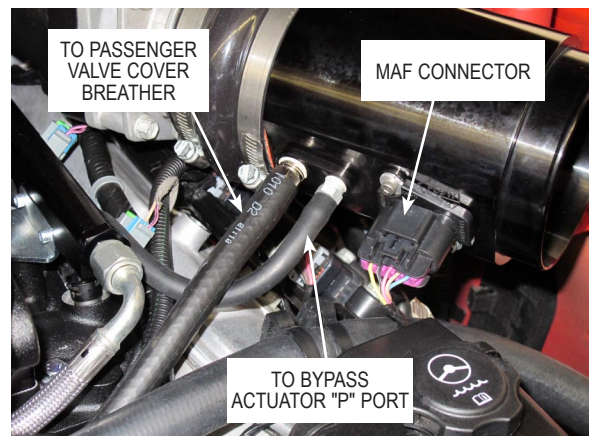


Fig 8AI

AL. Locate the OEM EVAP line that was originally attached to the EVAP solenoid and the intake manifold behind the throttle body. Using a utility knife, carefully cut the nylon tubing and remove the 90° fitting. See fig 8AJ.

AM. Cut a 23" long section of the supplied 5/16" fuel hose.

AN. Insert a supplied 14.5 stepless clamp on one end of the hose and attach the 90° fitting. Secure the fitting by compressing the clamp ear. Install the connector on the gray side of the EVAP solenoid as shown. See fig 8AK.



Fig 8AJ



Fig 8AK



Fig 8AL

AO. Route the free end as shown. Using another 14.5 stepless clamp, connect to the 5/16" elbow fitting located on the back of the super-charger on the inlet duct. Secure the line by compressing the clamps ears. See fig 8AM, 8AN, 8AO.

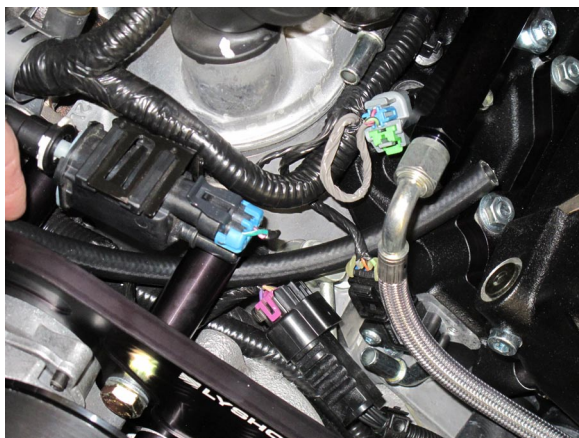


Fig 8AM



Fig 8AN



Fig 8AO

AP. Locate the OEM brake booster line and trim the end without the check valve approx. 1.25" from the bend as shown. See fig 8AP.

AQ. Insert the OEM check valve end back onto the brake booster. Attach the modified end of the hose to the brass barb fitting on the supercharger inlet. Secure the hose using the OEM hose clamp. See fig 8AP, 8AR.

AUTOMATIC ONLY: Reconnect the electrical connector to the brake booster check valve.



Fig 8AP



Fig 8AQ



Fig 8AR

AR. Cut a length of supplied 3/8" hose and attach one end to the crankcase breather port on the front of the passenger side valve cover. Route across and connect the other end to the 3/8 barb fitting installed on the MAF housing. See fig 8AS, 8AT.



Fig 8AS



Fig 8AT

AS. Locate a length of supplied 3/8" hose.

1. **Manual Transmisson:**

Attach one end of the hose to the crank-case port on the lifter valley plate. Route the hose alongside the passenger side fuel rail around the back of the supercharger.

2. **Automatic Transmission:**

Attach one end of the hose to the rear vent port on the driverside valve cover

AT. Connect the other end to the 3/8" elbow fitting on the inlet duct (adjacent to the brake booster fitting). See fig 8AV.

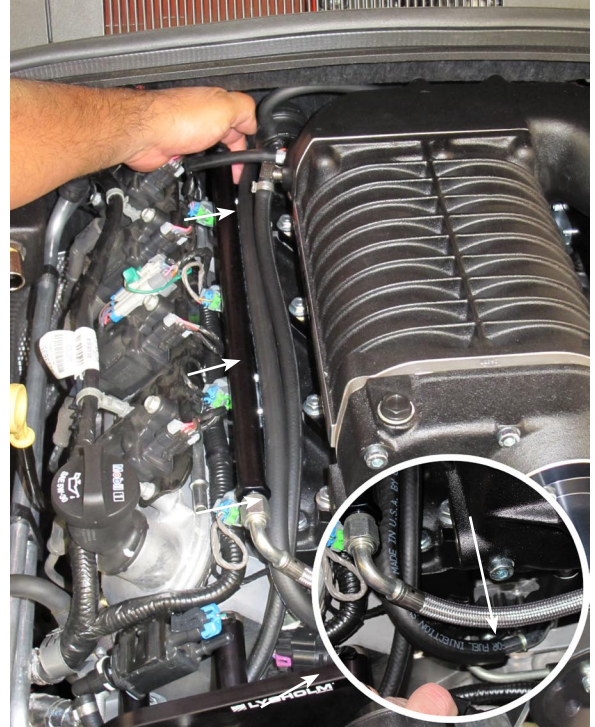


Fig 8AU



Fig 8AV

9. AIR BOX & FILTER INSTALL

- A. Locate the supplied air box and conical air filter. Attach the filter using the included hose clamp to the air box as shown. See fig 9A.
- B. Attach the pedestal mount to the air box using the supplied 1/4-20 x .5" hardware. Do not tighten screw at this time. See fig 9B.
- C. Locate the air box bracket support and attach to the side of the air box using the two (2) supplied 1/4-20 x .5" socket head screws and washers. Do not tighten hardware at this time.
- D. Remove the rubber mounting gromets and metal shield from lower half of the factory air box and reinstall them in the air box bracket as shown. See fig 9C.



Fig 9A



Fig 9B



Fig 9C

- E. Attach the supplied 5" to 4" reducing coupler to the air box with supplied clamps. Do not tighten the included hose clamps at this time.
- F. Lower the air box in to position by inserting the air filter down in front of the splash guard in the OEM air box location. See fig 9E.
- G. Align the pedestal mount to the bottom support grommet on the frame rail, while inserting the reducing coupler in to the MAF housing.
- H. Ensure that the OEM rubber mounts on the air box bracket are aligned with the OEM mount studs located on the inner fender.
- I. Using the OEM nuts, secure the air box bracket to the inner fender mount studs. See fig 9F.



Fig 9D



Fig 9E



Fig 9F

- J. Tighten the two (2) 1/4-20 screws securing the air box to the air box bracket, as well as the 1/4-20 screw securing the pedestal mount to the air box. See fig 9G, 9H.
- K. Tighten the hose clamps attaching the reducing coupler to the air box and the MAF housing.



Fig 9G



Fig 9H

10. FINAL COMPONENT INSTALLATION

- A. Reinstall the Front Bumper Cover (FBC) in reverse order from removal making sure to reinstall:
1. Two (2) 10mm-headed screws through the bottom of the FBC.
 2. The FBC electrical connector located between the passenger side driving light and headlight. Access the connector via the wheel well.
 3. Four (4) 10mm-headed screws and one (1) 7mm-headed screw attaching the FBC to the leading edge of the fender on each side (8 and 2 total).
 4. Three (3) T20 Torx screws securing each splash guard to the FBC (6 total). These screws are located in the wheel wells just forward of the front wheels along the outer edge.
 5. Two (2) plastic pins securing each splash guard to the inner fender structure (4 total). One is adjacent to the strut and the other is directly above the wheel.
 6. Two (2) 10mm-headed screws and six (6) plastic pins along the top edge of the FBC.
- B. Slowly refill the engine coolant through the spout located at the top of the radiator, allowing any air to escape as the radiator fills. Fill the engine coolant reservoir about 2/3 full. Squeezing the upper radiator hose and the air bleed hose, while you fill the radiator, will aid with purging out the air from the system.
- C. Using the washer fluid previously drained, fill the washer fluid via the new remote fill spout. Fill only so that the lower tank is filled.



Fig 10A



Fig 10B



Fig 10C

- D. Fill the charge cooler system with a 75/25 water/antifreeze mixture through the top opening on the surge tank. Fill slowly letting air to purge out as the system is filled. Reconnect the negative battery cable and turn the key to the ON position (DO NOT ATTEMPT TO START THE ENGINE). Make sure that the water pump is operating and that coolant is flowing through the surge tank. Add coolant as needed. Check all fittings for leaks. If the coolant is not flowing, remove the charge cooler supply hose and lower until coolant flows out of the hose. If necessary, provide light suction to the hose to help prime the pump. Verify coolant flow. Do not let the pump run for more than 30 seconds without coolant flow. Continue to check and fill the system until the level stabilizes.



Fig 10E

E. Install supplied passenger coil cover as follows.

1. Remove the two (2) lower mounting screws securing the #2 and #6 cylinder coil packs to the coil mounting bracket on the passenger side valve cover.
2. Install the two (2) supplied male/female M6 standoffs in the lower mounting holes of the #2 and #6 cylinder coil packs. See fig 10F.
3. Remove the four (4) upper mounting screws securing the #2, #4, #6, and #8 cylinder coil packs to the coil mounting bracket on the passenger side valve cover. See fig 10F.
4. Install the two (2) supplied M6x1.0x25mm button head screws into the upper coil pack mounting holes for cylinders #4 and #8. See fig 10F.
5. Locate two (2) M6x1.0x30mm, two (2) small diameter M6 washers, two (2) .175 spacers, two (2) spacer retaining washers, and aluminum coil cover.
6. Install the M6x1.0x30mm screws with small diameter M6 washers through the two upper holes of the supplied coil cover from the front, then from the back side, install the .175 spacers followed by the spacer retaining washers. See fig 10G.
7. Remove the oil fill cap, and install assembled coil cover as shown.
8. Thread the two (2) M6x1.0x30mm screws into the upper holes in the OEM coil pack mounting bracket and the two (2) M6x1.0x16mm screws with small diameter M6 washers into the lower holes threading into the previously installed standoffs. See fig 10H.
9. Reinstall oil cap, and check that all hoses and wires are free from any sharp edges.

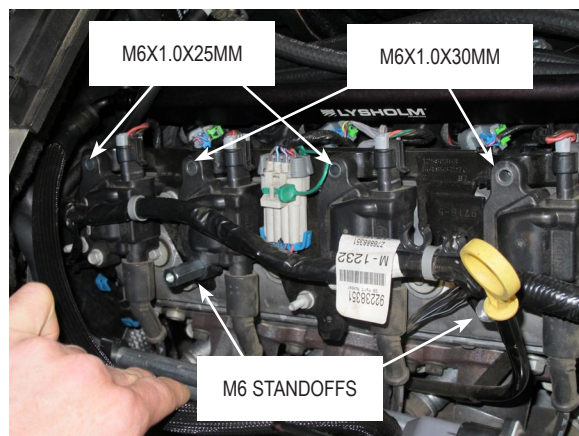


Fig 10F

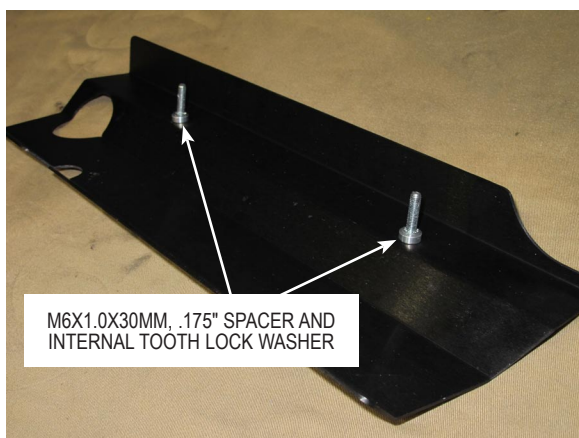


Fig 10G

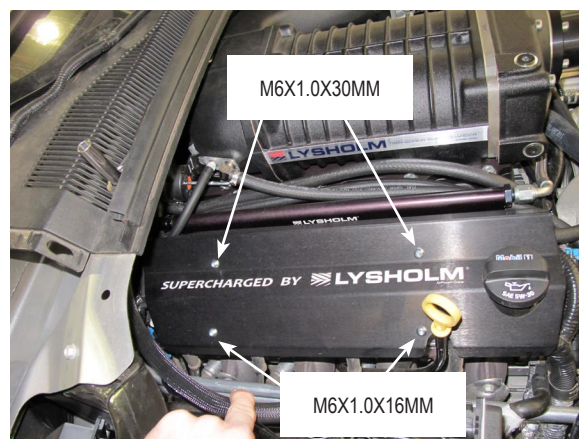


Fig 10H

11. REFLASH COMPUTER

IMPORTANT! To ensure trouble-free programming of your vehicle's computer:

- Make sure the vehicle's battery is sufficiently charged.
- Turn off all accessories and close doors to prevent unnecessary drain on the battery.
- Locate "exterior" fuse panel and remove Qty 1 INFO, Qty 1 RADIO and Qty 1RADIO AMP labeled fuses. (If applicable)
- Do not attempt to program your vehicle while a battery charger is connected
- Improper battery voltage will result in failure of the programming process.
- Do not disconnect the cable or turn off the ignition during programming.



Fig. 11A

- Reconnect the battery if previously disconnected.
- Locate the vehicle's OBD2 connector located under the dash on the driver side of the vehicle. See fig 11B.
- Attach the OBD2 connector from the Flash tool that is provided in the kit to the vehicle's OBD2 port. Make sure this connector is seated all the way in the vehicle's OBD2 port. You don't want this connector to disconnect during programming or damage may occur to the vehicle's ECM. See fig 11C.

NOTE:

- All vehicles equipped with On-star that have aftermarket stereos will experience problems with the ability to re-program the vehicle's ECM. It is necessary to disconnect the aftermarket stereo from the factory wiring harness before continuing with the programming procedure.

- Do not disturb the cable or turn the ignition off during this time. If the programming is disrupted, the computer will not start or run your vehicle!



Fig 11B



Fig 11C

NOTE: If you have any questions throughout this procedure, please contact our service department for further assistance.

- D. The reflash tool should power up and display PROGRAM VEHICLE at the top of the screen. Press the SELECT button. See fig 11D.
- E. PREPROGRAMMED TUNE will be displayed at the top of the screen. Press the SELECT button. See fig 11E.
- F. Read the disclaimer entirely, then press the SELECT button if you agree with the terms of the disclaimer. See fig 11F.
- G. At this point you will need to turn the ignition to the ON position (do not start the vehicle). Set the parking brake and press the SELECT button to continue. See fig 11G.
- H. The reflash tool will proceed to check the Operating System (OS) part number of the vehicles ECU. See fig 11H.

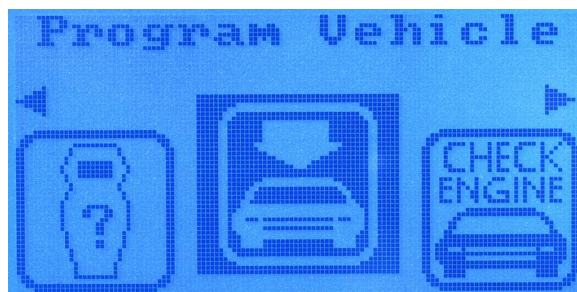


Fig 11D



Fig 11E

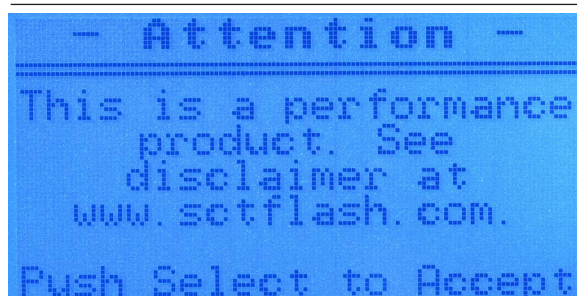


Fig 11F

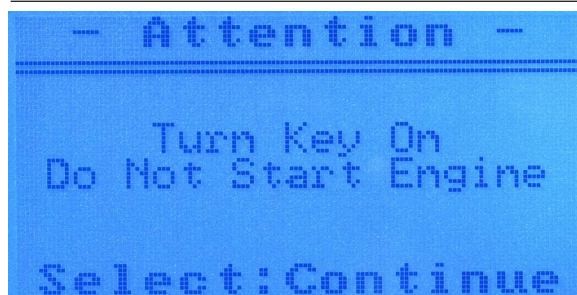


Fig 11G

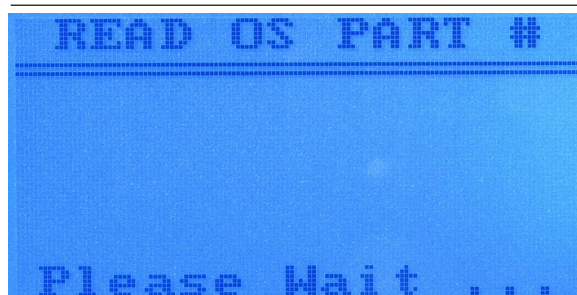


Fig 11H

- I. Once the tool has identified the OS of the ECU, you will see SELECT AUTO displayed at the top of the screen, and a list of available tunes below. Use the arrow keys (up and down) to select the appropriate tune for your vehicle and press the SELECT button.

NOTE:

If the vehicle is equipped with an automatic transmission, select: "LYSHOLM CAMARO A6" (see Fig 11I)

If the vehicle is equipped with a manual transmission, select: "LYSHOLM CAMARO M6"

- J. ADJUST OPTIONS will be displayed at the top of the screen. Arrow down to SKIP OPTIONS and press the SELECT button. See Fig 11J

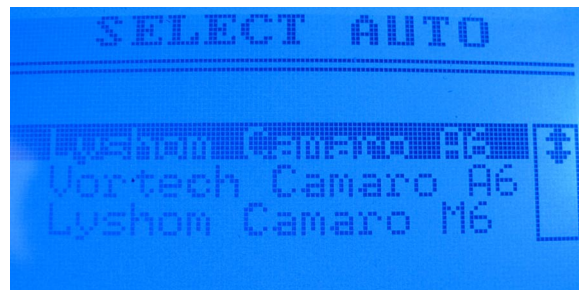


Fig 11I

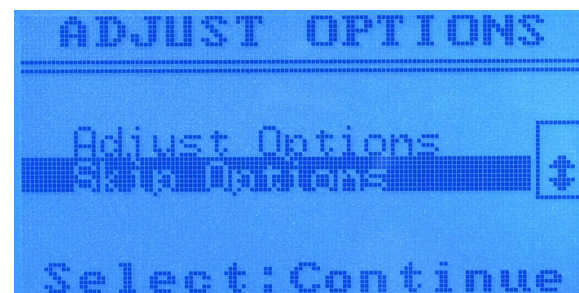


Fig 11J

- K. PROGRAM VEHICLE will be displayed at the top of the screen. At this time make sure you have turned off any additional accessories that may cause unnecessary draw on the vehicles battery (headlights, radio, etc.). Press the SELECT button to proceed with BEGIN PROGRAM. See Fig 11K
- L. Automatic vehicles will require a second selection. See Fig 11L.

NOTE: Once the programming sequence has been started use care NOT to disturb the cable, or turn the ignition or any accessories on or off during this time. Throughout the programming sequence it is normal for the Reflash tool to AUTOMATICALLY cycle the vehicles power on and off. If the programming is disrupted, permanent damage to the vehicles computer may result!

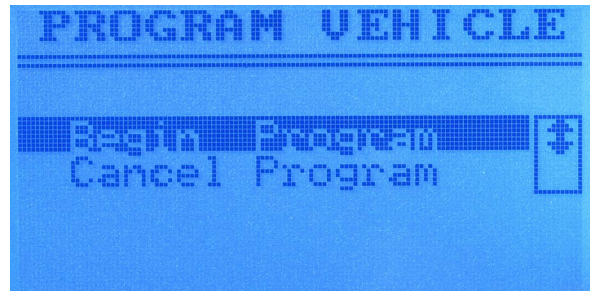


Fig 11K

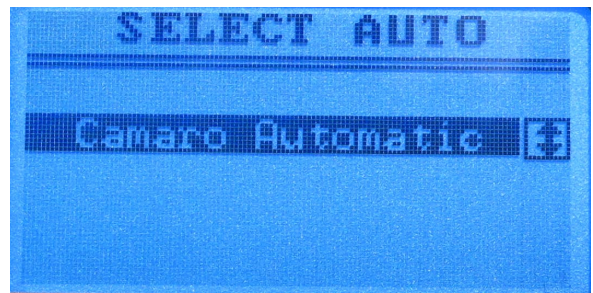


Fig 11L

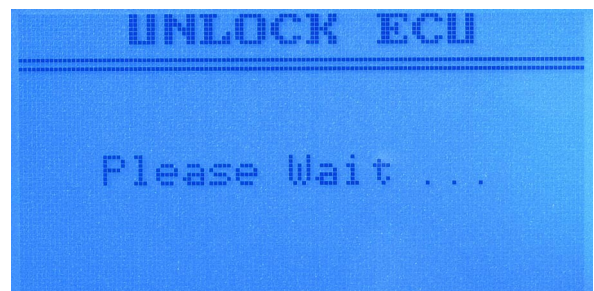


Fig 11M

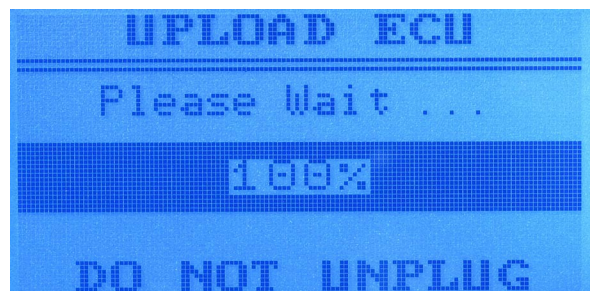


Fig 11N

M. The reflash tool will then automatically proceed through the following screens during the programming process. See fig 11M thru 11S.

- i. Unlock ECU
- ii. Upload ECU
- iii. Setup Device
- iv. Make Adjustments
- v. Calculate Checksums
- vi. Unlock ECU
- vii. Download tune

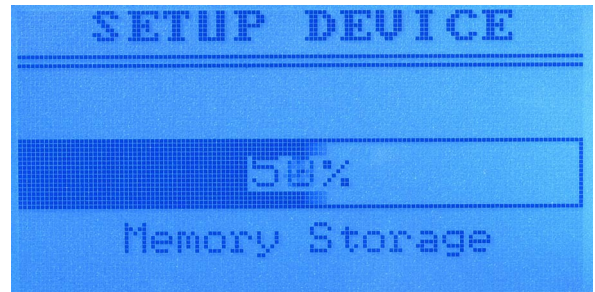


Fig 11O

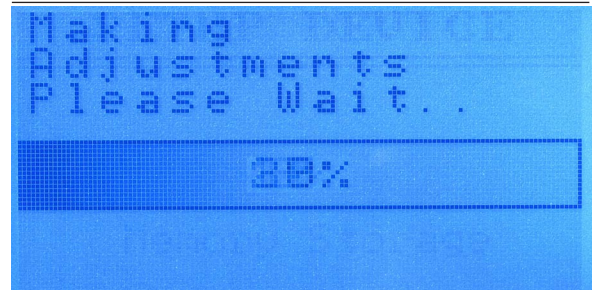


Fig 11P

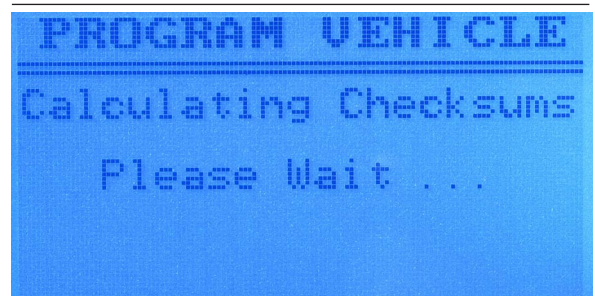


Fig 11Q

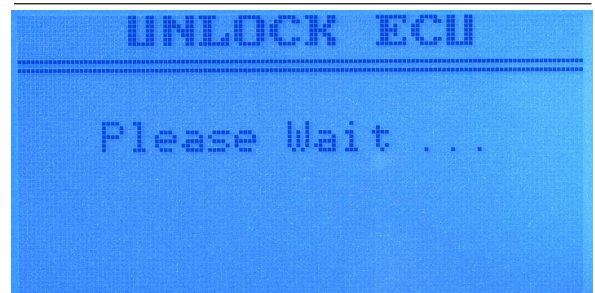


Fig 11R

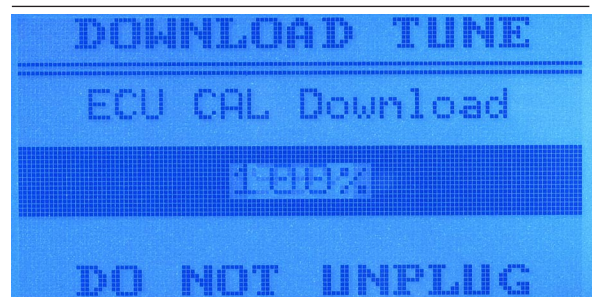


Fig 11S

- N. Once the reflash tool has completed the DOWNLOAD TUNE process the screen should read "Turn Key Off And Remove key." At this time remove the key and press the SELECT button to continue. See fig 11T.
- O. Once the tool has successfully completed the POWER DOWN ECU sequence you will see "Download Complete" displayed on the screen. Press the SELECT BUTTON. See fig 11U, 11V.
- P. CONGRATULATIONS! You have successfully completed reflashing the vehicles ECU with the Vortech Supercharger Calibration. You may now unplug the reflash tool from the vehicles OBD2 port.

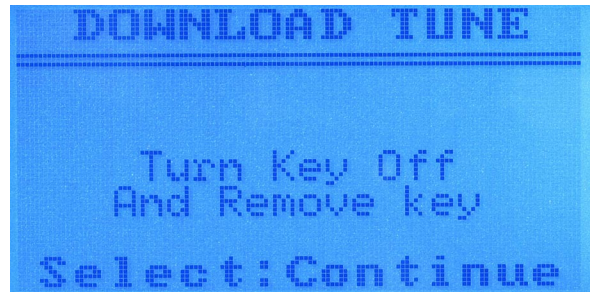


Fig 11T

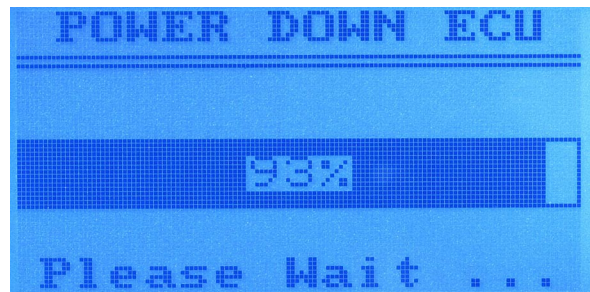


Fig 11U

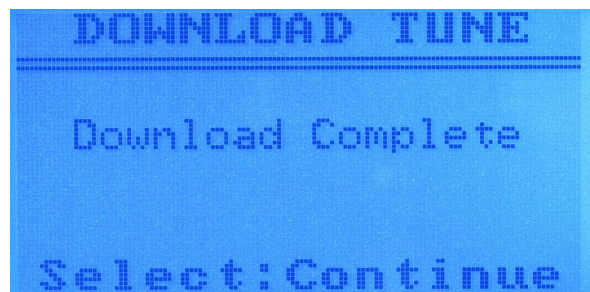


Fig 11V

12. FINAL CHECK

WARNING: Do not attempt to operate the vehicle until all components are installed and all operations are completed including the final check.

- A. If your vehicle has gone over 15,000 miles since its last spark plug change, you will need to change the spark plugs now before test driving the vehicle.
- B. Check all fitting, nuts, bolts and clamps for tightness. Pay particular attention to oil and fuel lines around moving parts, sharp edges and exhaust system parts. Make sure all wires and lines are properly secured with clamps or tie-wraps.
- C. Check all fluid levels, making sure that your fuel tank is filled with 91 octane or higher fuel before commencing test drive.
- D. With the radiator cap still off, start the engine and allow to idle a few minutes, then shut-off.
- E. Re-check to be sure that no hoses, wires, etc. are near exhaust components, sharp edges or moving parts. Look also for any signs of fluid leakage.
- F. With the radiator cap removed, start the engine and allow to idle bringing the engine up to operating temperature. Watch the fluid level at the radiator spout and fill as necessary.
- G. Once the engine is up to normal operating temperature you can shut the car off and replace the radiator cap. Check the overflow reservoir level and fill as necessary.
- H. Check the CAC cooling system level and fill / purge as necessary. The CAC surge tank should be 2/3 - 3/4 full after proper air purge. Do not overfill.
- I. PLEASE TAKE SPECIAL NOTE: operating the vehicle without ALL the subassemblies completely and properly installed may cause FAILURE OF MAJOR COMPONENTS.
- J. Test drive the vehicle.
- K. Always listen carefully for engine detonation. Discontinue heavy throttle usage if detonation is heard.
- L. Read the STREET SUPERCHARGER SYSTEM OWNER'S MANUAL AND RETURN THE WARRANTY REGISTRATION FORM within thirty (30) days of purchasing your supercharger system to qualify.

LYSHOLM SUPERCHARGER INTERNAL LUBRICATION FLUID CHECK

This supercharger has been factory pre-filled with special Lysholm synthetic lubricant. Oil does not need to be added to a brand new unit; however a fluid level check should be performed.

Prior to operating the supercharger on the vehicle and after installation onto the vehicle:

Check the supercharger fluid level via the factory installed dipstick located on the top of the supercharger case. Do not operate the supercharger without it.

Fluid level checking procedure:

1. Ensure that the fiber sealing washer is located on the dipstick base.
2. Thread the clean dipstick into the unit until it seats.
3. Once the dipstick has seated, remove the dipstick from the unit. Fluid should register in the cross-hatched area on the dipstick.
4. **DO NOT OVERFILL!!!** Drain excess fluid from the unit if it is above the maximum level on the dipstick.

Check the supercharger fluid level using the dipstick (or sight glass if equipped) at least every 5,000 miles.

The supercharger fluid must then be changed at least every 30,000 miles.

- i. Drain the fluid, re-fill the unit only with 5.4 oz. (6.7oz for 3.3L) of Lysholm supplied lubricating fluid.
- ii. Confirm proper oil level using the dipstick. **DO NOT OVERFILL!!**

WARNING: Use of any other fluid other than the special Lysholm lubricant will void the warranty and may cause component failure.



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